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REPORT

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The Games machine

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Computer magazines are getting increasingly specialised as everybody places their bets on ST or Amiga dominance of the leisure market; and even within the format, concentrating on EITHER games OR the more serious software. It's as though magazine publishers regarded their readers as stuck in claustrophobic pigeon-holes. At TGM we've always regarded computers as fun, whether it be playing the latest flash-vm-up on the Spectrum or laying out a page on a Mac Ix and drawing a stuffed bulling to brighten up a feature page using Adobe Illustrator. Computer users do move from applications (writing a letter on your Spectrum package) to playing games for relaxation. That's why TGM covers everything. But we're proud that — for a review or an article on using Mac software on an Amiga — what you read in TGM is tried and tested by experts and the writing is authoritative. That's why you buy TGM — that's why we write it. The best computing years are yet to come...

AN EYE ON THE FUTURE



LOOKING FOR THE ATARI ST — The Power Graphics Interface (PGI) will be 10 million on page 11, though 100,000 copies are left reported on R...



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AND WIN...

The original Starline Laid painting for Teeny Dement's Hybris, plus copies of the game for ST, Amiga, C64, Spectrum or Amstrad ■ **Page 74**
PLUS: Yet another TGM Hotline £1,000 cash prize! ■ 10



SKATE OF THE ART

The crazy game for all Skateboard fans
Out on the **Amiga** from mid July.
Don't miss it...



THE CHAMP

Licensed by the **WORLD BOXING COUNCIL**, **THE CHAMP** is simply the most realistic boxing simulation ever written for the computer.

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NEWS 'N' PREVIEWS

STUFF THAT HAPPENED — STUFF THAT WILL

GUNNING FOR A MARKET

After the huge video reception to the Starline Lightgun, Cheval is planning to build on their new lighting, the Defender, an specially designed games from top budget software house Code Masters. Even set to disappear, as the Starline version has, Code Masters are playing 'a much better' top program on the job.

The games are Super Texas-Ali (pace across

Pinball Simulator rewritten by the Oliver Twins).

One interesting point about the Defender lightgun is its design. Starline specifically designed their gun to look futuristic, avoiding any resemblance when selling it to Germany — where such items, like computer games, are subject to stringent controls. However, Cheval's version appears much more realistic, and seems as though it's also producing a 684 version. They



Annexed: Super Street Cop (ages, from training in the rifle range to sniping bank robbers) Harrier Attack (only a working title for a game similar to MIG 28), Italy the Rat (fast draw shooting, partner); Jungle Warfare (action writing title for a game similar to Green Beret); and a new version of Advanced

may find some difficulty in selling it to the lucrative 684 market in West Germany.

Look out for a full review of the Cheval Defender, and its games, next month.

Silent STE

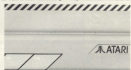
It's confirmed, the Atari STE does exist.

However, Atari aren't waving flags and blowing bugles to announce its arrival. During a recent trip around all the major software houses, Atari were conspicuous for their absence of fanfare. One software manager from a top software house commented: 'All they did was bring it in, show us what it does and go.

No fuss or anything.'

So perhaps Atari are admitting defeat in the ST/Amiga war? Over 70 development machines have already gone out to software houses.

The new STE (to be launched at the PC Show in September), which will retail for the same price as the present ST (£199), but no software, features a new sound chip with stereo sound, and



hooking in an already no-one may even notice; is it an old ST or a new STE?

improved graphics features with 6504 colours, faster handling of scroll and joystick capabilities.

The new STE is compatible with the old, and even looks the same. In fact an Atari spokesman informed TUM that they may even put the new STE in the recent Foreverpack bundle without even telling anyone, thus starting the phasing out of the old model.

Like the Spectrum 128K, software houses have pledged their support for the new model, although games presently in production will not have enhancements.

Second sight, double vision

While people are going gaga at the Game Boy and prepare to go anywhere over the Ocean — not to mention the hand-held Atari, now christened the Lynx — distributors Polax, of East London, are set to blow the dust off the aged Coleco Vision console.

The C88 machine was released at the beginning of the decade, during the era of the Atari VCS and Intellivision, but failed to make an impact in the console market as slow the embryonic but fast-growing home computer industry.

With supplies of the Coleco available from abroad, particularly the Far East, Polax see a potential new market for the decidedly Seventies-looking machine. With a retail price tag of £50 in mind — a fifth of

the original price — Polax are waiting for trade response before committing themselves to a probable September launch.

The old, but classic and accurately converted, Donkey Kong is likely to be included with the Coleco and there are some 180 other cartridge readily available from various parts of the world.

It's a shame that Polax won't be dealing with Coleco peripherals (even going as far as blocking off the expansion port) for racing games, there exists a covering wheel and brake pedal, originally launched at the same time as the Coleco — the Texas Instruments' astigmatic control device aren't as original as many people believe.

Though the Coleco Vision is

undoubtedly a quality machine — it could give the 8-bit Sega and Nintendo a run for their money — there are too many new and more advanced consoles and computers on the market, and in the pipeline, £50 is a nice price for the Coleco but this 18-year-old machine is unlikely to gain a stronger following than it did during its youth.

Showdown

It's that time of the year. Usually there's only one comparison show to be seen at, the Personal Computer Show at Kado Court. However, this year there's three dates for you diary.

Although criticised last year for lacking any decent launches — in both the home and business fields — the PC Show (September 17-October 1, Kado Court) is back with a bang, running launches of the STE with a basketful of games releases (probably the same ones premiered last year).



Another whopper about?

The Computer Shopper (November 1985, Alexandra Palace) takes its debut this year. At first look it may seem like another Mayfair or Atari Store, but a closer examination of who's contributing reveals a number of names: Atari, Amstrad, Commodore. They'll be a bevy of people to answer your queries, a programmer's challenge and loads of special offers on hardware and software (mostly consisting of 'serious' stuff).

And, as it that's not enough store-bag off, there's the Third Alternative Mega Store and Electronics Fair based at Rugby Hall on Watlington Street Ground (November 11). Famed for covering almost every computer (except the Amiga, ST and PC), the AMSEF is a great place for meeting fellow owners and picking up the odd bargain.



This TV series is dead. It has ceased to be.

No, it's just sleeping, according to Virgin Mastertronic. The Monty Python team are back. Portered, from left to right: John Cleese, Terry Gilliam, Terry Jones, Graham Chapman, Michael Palin and Kris Iles. The team who gave you six of the best in the worst possible taste are back on your screens next spring, with releases of Virgin's all-domain computer version.

ACTIVE SALES

First there was Wonderboy (Activision chart hit of summer '85), then appeared Super Wonderboy, and finally Wonderboy 3: Monster Land. Next month sees the release of the second in the series, on all formats from Activision. A new mutated hero, Tom-Tom is once again rolled into action as the livelihood of Wonderland's inhabitants is threatened by a dastardly dragon.

In comic strip fashion you have five types of armor and shield, and another five types of boots. There are also many treasures to collect along the way, including: quarters, helms, shields, and amazing winged boots (up, up and away). As in its close relative Super Mario Bros, you'll also come upon hidden doors, revealing tre-

asures, hospitals and even hot-tube rollers (ST version). They're mean, they're mad, they're *Dynamite*. Don Ancharba the Great has captured Looey, who also to call him best friend, friends, Ben and Poo, that dashing duck duo.

Super Wonderboy (above) and Dynamite (see right) competing on the Atari ST

TALES FROM

SIERRA

Here's a collection of the latest Sierra Online games, as seen in an exclusive preview to our American writer, Marshall M. Rosenthal, who wrote more background information on them in last month's adventure section. (All photos on IBM PC, and by Marshall M. Rosenthal.)

Hoyle's Book of Games

Hoyle's Book is a virtual collection of eight wonderful table-top games. Keeping an eye on your opponent's action is often as important as keeping an eye on your own cards (which are not as intimate as they may seem!).

King Arthur and the Search for the Holy Grail

The quest, my son, is to find the fabled Holy Grail. To help (and hinder) you on your quest may I introduce you to

Galahad, Sir Lancelot, Merlin, and your old friend Excalibur.

Designed by certain writers and animators, King Arthur is an animated adventure featuring arcade sequences. Pictured here is the sequence where you must do battle with the Black Knight.

Colonel's Bequest

Take part in the exploits of Agatha Christie and this is what you've got: a 1930s murder mystery set in the grounds of a large manor. A new feature in Bequest is that everything happens in real-time — things happen regardless of whether you're there to watch them. Friction feet are required!

Codename: Ice Man

As Johnny Westhead, US Navy SEAL, you must take control of a submarine and rescue an American ambassador held hostage in North Africa. Animation is involving, featuring special windows that appear at the top of the screen adding extra information. There are three types of perspective: chesslike, medium and far shots. Although mostly adventure and simulation, there are a few arcade sections, as shown here with the dice game.

Sierra vs. Atari. Up to bottom: gaming with Hoyle, The Colonel's Bequest, two from the Ice Man, and Arthur in the Grail (right and below).



filled with comic elements and non-stop surprises. Dynamic 3Dx medium and large, two local seats, and — Arima and ST only — a two-player option for double the fun. That is to be available on all formats, and ready for release in September (ST screen.)

Altered Beast has been "baking" around the arcade for over a year now, and it's about time we all saw a computer version. Activision have taken up the opportunity with open arms (and golden). The graphics on all versions certainly look good, but will it still be playable? Read on to all former soon. (C64 screen.)



Altered Beast makes it into the Commodore 64 (above)



Tell me a story

Info

After a fall of two or three months, while they sorted out what's going on when told, the Victory-based computer game, known as French Railroad, MicroProse also unveiled their plans for some of future releases.

The eagerly-awaited follow-up game from Geoff Crammond (author of Sentinel) has finally arrived, under the guise of Saint Car Baine.



As a world-renowned racing driver, you must steer your car through eight challenging levels in each of four divisions. However, your car is not just a pile of metal and requires skill and precision to guide it over bridges and ramps, and around obstacles. From the instant you're lowered by crane onto the track, you know that this is not just another simulation game.

Saint Car Baine is far all you young racers out there, as it'll be on the ever-so-old MicroProse label. All formats are expected in September, with ST and Amiga versions allowing you to connect two computers together for simultaneous play.

Originally titled Government From Somewhere, the arcade conversion of the flying shoot-'em-up, P-47, is



Top: Saint Car Baine, above; conversion of arcade hit, P-47

almost complete. Pictured on the IT, it should be available on all formats soon.

From MicroProse, the company that brought you Gunship, SeaArk Fighter and many many more war simulations comes — in conjunction



Above and below: transship-entailing action in Rainbow Warrior from MicroProse

with the global preservation organization, Greenpeace — Rainbow Warrior. Get past those transship-entailing battles, stop those evil real cubes and give a whole new meaning to the 'live the universal' slogan. Definitely one of the most attractive games previewed this month, you can expect Rainbow Warrior in September on all formats. (IT pictured.)



Double trouble with Atari-style graphics as characters come at you from all angles in the latest two-player game, Xenophobe



Every picture tells a story

You don't have to be an award-winning artist to play Donkey's follow-up to the top-selling Thrax, French Pottery. All that's needed is a quick hand and a vivid imagination. Rack through many drawing utilities and sketch out a rough design, that will give your friends a clue to the word. It's a bit like charades with pictures.



French Pottery. Graphics may alter

without one sighting of Patrick Sawyer, Infogrames' next wargaming extravaganza in North and South — described by the French company as 'a game of strategy, tactics and morale', with an emphasis on strategy. The story of the 1860s North and South allows you to play either side, against a computer or human opponent.

In order to recruit armies you must acquire bases (in the form of gold) which are transported across America on trains. Of course, controlling a few railway stations will help your pursuit of real power. Get your hands on five



Top and above: all American battles apply to Infogrames' latest game, North and South

sacks of gold and a new army is yours, all ready and waiting to gain your victory.

Acquire elements and their hearts in the battle scenes where you take control three types sections of your army: soldiers, cavalry and infantry. Obviously, various sections are suited to certain movements. And if that's not enough, there's also those pesky Mexicans to deal



While the French celebrate their revolution, Infogrames release North and South (Atari ST picture)

games info



Running to your life...

with...
Only on the ST, Amiga and PC, North and South should be available in October.

In *Intelligence*, Iron Trackers you're running for your life, literally! You are placed on Iron Island, where the master of the island's terrorist sport

is. Miss training! However, the rewards are high, so — stuck in poverty and depression — you volunteer yourself. Before the contest you must equip

yourself with various weapons. Do you want strength or speed? And what sort of weapon do you fancy?

All you have to do is cross from one side of the island to the other — there are no rules! Along the track there are traders who will supply you with extra munitions for your chosen weapon. Filled with laughter and suspense, Iron Trackers is available on ST and Amiga in September. (ST screen.)

The year is 1993. You are at the forefront of a ground (and

space) breaking exploration trip — at the controls of the robot headed for the moon! Good luck, Tintin!

Before you even set down on the moon, you must pilot your way through various dangers, take evasive action to thwart your competitor's plans to sabotage your mission, and successfully complete a complex entry and landing procedure. When on the moon, keep an eye on your faithful companions Snowy, Captain Haddock, Professor Calculus and Weird, the engineer. The evil Colonel Bots will try to capture them all, sabotage the ship and prevent your return to earth.

It's intergalactic action all the way. Tintin is available on all major formats this autumn.



(ST screen.)

Also new from Intelligence is their first ever roleplaying game. RPGs are even bigger in France than they are here, so expect *Disillusion* to contain every feature imaginable. It's taken five of France's top programmers, artists and designers a whole year to develop, and contains a plethora of rooms, monsters and spells. Coming soon on the PC, Amiga and ST.



RPG action and outer space adventure with *Disillusion* (top) and *Tintin* (above and right)



Tell 'em about the mummy

Rainbow Arts, producers of top-notch arcade games, are about to surprise everyone by releasing *Mystery of the Mummy* — an adventure

Detective skills are a necessity as you try to unravel the conundrum. Jump in your chauffeur-driven car — your employees can't go! — and use it to travel to one of 180 locations in Humberg and question people. You've only five days to solve the mystery, and time is running out! The game contains over 500 original graphics drawn in charcoal and then digitised to computer. Due to the strange way some of the ST screens. Through them, Rainbow Arts feel they can convey the real strange atmosphere of 1912 Humberg. Available on the DM, ST, Amiga and IBM PC... soon.



How the epic begins then convey an "atmospheric" scene



The great mummy quest. You are the "mummy" and will be the first to see the mummy. The mummy is the first to see the mummy. It will be the first to see the mummy.

Hewson onslaught



Hewson's latest 16-bit blockbuster, *Descent*, programmed by Chris Hawley and Nigel Howkins (of *Vendetta* and *Cartoon Wars*), is set in the land of 'imaginal' workers. As a peaceful sort of chap your task is to destroy the warlike

factories that are pulling the busy kingdom apart, and take control of all the land (imaginarily).

The whole game is set on a campaign map with ten kingdoms (each with 100 locations), in true roleplaying fashion, travel over many

types of terrain (some need a submarine), and encounter castles, cavalry, carpets and cannons.

There are a variety of 'undead' who must be treated with caution — especially the black rider. And you can come up against four types of oppo-

sition in desperate hand duels. There's also the risk that a territory already governed by you might rebel.

Descent is a truly epic adventure (even allowing you to create and name your own kingdom). November release on Amiga and ST.

Aboard the Ocean liner

Looks a bit familiar, doesn't it? Well, it seems that even the great Ocean can't sail out on a good day when it comes sailing. With *Black Panther* and *Black Mirror*, *Black* seems to be launched, the banner of the season is definitely right.

With most of the US Air Force planes already snatched up for simulation, Ocean have jumped for the futuristic F-28 *Crusier* prototype. Presently rated F-28 *Crusier*, the game features a high proportion of strategy, as well as the usual

dogfight sequences.

Programmed by Digital Images (in fact one of the programmers helped on the 16-bit skyward hit, *Falcon*), *Crusier* is set for a 16-bit-only takeoff soon.

Ocean are hoping their latest take-over conversion will succeed. *Operation Wolf* is being the year's Christmas number one. Programming in the Spectrum version of *Crusier* HQ (pictured) is particularly finished, with plenty of people helping out on the other versions. Although

another track game, Ocean's shuffles software Manager, Gary Hawley was quick to point out that it's a real improvement over the usual, awful WEG. In *Crusier*, Whereas WEG was like a diary across a giant level, Gary argues that they'd be no let up in *Crusier* HQ. And he's all accurate. He's right, the Spectrum version, we played was great, too, with all the characteristics of the arcade game.

Black Valley isn't the first sports game to spring to mind

when thinking of a sports simulation. However, due to its increasing popularity (mostly through Channel Four), Ocean have certainly almost their own version of the game. Ocean France, to produce a beach volleyball game. With just two players on each side of the net, there's no time to eye-up the local talent (that 12 courts). Graphics are great, sound contains rock 'n' roll tunes and speech, and some hilarious inter-country scores are thrown in for good measure. Expect *Beach Volley* on all formats in your shops very soon... (Amiga screen.)



Beach Volley has hit on the Amiga ST, with *Crusier* HQ Spectrum version centre and ST *Crusier* above

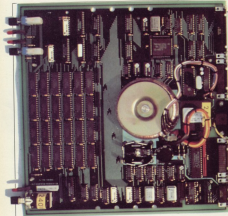
LANCASTER

A black and white photograph of a Lancaster bomber in flight, viewed from below, flying over a body of water. The aircraft is a four-engine heavy bomber with a distinctive tail fin. The background is a clear sky and the ocean surface.

Actual Screenshots

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Made in TECHNICOLOR

(c) 1989 Entech Research Productions Ltd • Screenplay by Robin Candy
Cameraman Michael Parkinson • Director Roger Kean

Parlex, a unit of astronomical distance equal to the distance from earth at which stellar parallax would be one second of arc; equivalent to 3,262 light years. (From **PARALLAX** and **SECOND** (also: Star Wars); **Parl Solo** and the Millennium Falcon complete the **Kessel Run** in less than 12 parsecs.

TG14 test previewed the Parlex Graphic Interface way back in

Issue 7. Since then we've heard relatively little from the designers at Entech Research in Birmingham. In fact the **Parlex** seemed destined to join the ranks of great machines that never were. However, the design has been finished, the coding picked, the programs perfected and Entech are ready to smash the world all over again.

Entech are a four-way partnership between David Groll, Martin Leighton, Ian Moore and Mike

Haidig. It was formed when Ian Moore approached David and Martin with an idea for a graphics board. David and Martin provided the technical backing and Ian designed the hardware. Software design has been handled by freelance programmers spread around the country, with the art program developed in West Germany. It is only recently that the whole team has got together in one place ready for the final push to launch the **Parlex**.

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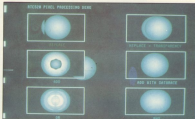
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The ParSec Pixel Plus board, hardly larger than a copy of TQM (the issue in which we first broke the news), will fit inside a case making a handy monitor stand. Pixel processing is the name of the game (above, in a special demo which uses different commands), and SPEED! The horses in the demo (right) speed up fantastically while a magnifying glass (not seen in pause mode) looks unerringly over them. Below is the Vint PC port-address showing block commands and the ability of pixel processing to switch from positive to negative image. All the pictures are from routines included in the ParSec free package.



If you previously missed all the hoop-ha about the ParSec Graphic Interface, here's a quick summary.

The unit is designed primarily for graphics use, being capable of producing very high resolutions with many colours. But it isn't just a graphics board, rather a computer with its own onboard 32-bit processor that happens to be extremely good at graphics. The present versions plug into the ST and use it as a host computer. The ST's mouse and keyboard are used as input devices, information is saved using the ST's built-in disk drive and sometimes the ST's memory is used to provide additional RAM, while the ParSec performs all the difficult work. It was originally planned for the ST merely because the ST had the larger market, particularly in Germany where the majority of STs are used for business applications. However, versions are now also planned for the Amiga and PC.

The ParSec was already in prototype form 12 months ago. So what then caused the year-long delay? David Enoki: 'Essentially it was the world shortage of Video RAM chips. Prices rose by as much as four times. The ParSec

uses 34 VRAM chips and we would have had to pass the increase onto the end user. So we decided to delay the release and use the time to fine tune the hardware. As it is we've had to increase the price only slightly.

The basic unit, the ParSec 4166, costs £919.95 (and not £499.95 as reported in last TQM). This unit boasts a resolution of 1024x768, a colour palette of 4096 colours, 750K VRAM and speeds of 8.25 MBPS.

Bundled with the hardware is the Vint, an art package. This includes most of the functions featured in popular art programs: zoom modes, block commands, adjustable antialiasing, outlined and filled geometric shapes. However, one completely new feature is a little menu entitled Pixel Processing. Although not too sure how it works themselves, Elmtech were quick to show what it can produce. Basically, the program takes two numbers, puts them through a choice of logic gates (logical operators are basic binary calculations) to produce another number (converted to a colour). Using this system you can create many colours with one stroke of the paint



TECHNICOLOUR



brush, create weird animation effects, and even give the impression of a negative when using a black and white picture. (See photographs.)

Once you've bought your 4786 you can increase its graphics capabilities to phenomenal levels with the 8756 expansion board (2458.05). The palette is increased to a mindboggling 16,777,216 colours with a maximum of 186,808 colours onscreen at any time—that's an incredible 256 different colours per line! Memory can also be increased to 4MB with optional RAM cards.

The hardware specifications are impressive enough, but what will the ParSec actually be able to do, in terms of graphics, just about anything you want—and like its name says, FAST! Upgrades are planned for the 16-bit art package, but it is the professional paint package (due for release sometime in October) which should really get the graphic artists slaving. The programmers have been working on the package for a few years now and have just been waiting for the right hardware to arrive. The program is not only capable of producing the ParSec's 16 million colours, but also emulating a variety of canvas textures and paint

techniques, like water colours and chalks. This is not a simple pixel positioning program. Anyone who has painted with watercolours will know that the appearance of the paint on the canvas is heavily influenced by the texture of canvas. Similarly with chalks, and the amount of pressure used. This could well be the first 'real' art program—designed for professional artists rather than computer users who can draw. The package will be modular with additional programs available for animation and ray tracing.

Ray tracing is a technique used to generate realistic shadows and shading. The user specifies the light source(s) and the computer does the rest for you. Currently such packages have been rather limited. Some only allow you to construct pictures using geometric shapes, while others take a long time calculating the ray trace (up to half an hour!). The ParSec will be able to calculate ray traces as you draw!

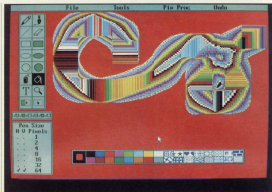
Rather than develop a wide range of software themselves, Emtech have included a GEM driver with the ST version of the ParSec. This allows any programs which run under a GEM-based environment to work in conjunction

with the ParSec. The benefits are obvious. For instance, if you already own a good GEM GTP package the ParSec will enhance its performance with increased resolution, colour palette and speed. Amiga and PC versions of the ParSec should also be compatible with a number of existing applications packages.

Desktop and digitiser interfaces are planned for the beginning of next year, but a quick look at the TQM Guide to Digitisers (Issue 21/02) shows that the Amiga is already capable of digitising to high standards. Imagine a full-colour digitised picture on the ParSec at a resolution of 1604x768—it will be almost impossible to tell which is the photograph and which is the digitised picture. Couple the graphics capabilities with a joystick interface and you could be producing broadcast quality titles and animation at a fraction of the cost. In fact, video production companies have already shown great interest in Emtech's new baby.

The ParSec is clearly aimed at the specialist graphics market. The cost of the top-of-the-range system may seem expensive (and bear in mind you need a non-instanced monitor with a minimum resolution of 640x480) but it seriously under-

All the pictures on these pages were taken on an Atari ST using the lowest ParSec resolution mode (640x480).



A standard port-screen from the IQ, the girl in the top left picture hardly fills the screen, and so uses even less of the lowest resolution. Above is a pixel processing demo showing what can be done with just one brush and the right command! (Showering off, Robin Candy did the picture below: he drew the right-hand half then used pixel process commands (highlighted) to convert the picture to the left-hand half of the face. It may not look like much, but it represents staggering pixel power.

cuts the £150,000 graphics workstation, which perform similar functions. Anyone involved in any aspect of design, from textiles to architecture, will find the ParSec an invaluable, and very cheap, tool.

Of course the potential for games software is enormous. Emtech have already been approached by several well-known

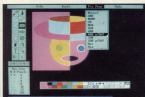
software houses. A Barbarian-style game is already in the pipeline — one that could be the first computer game that really does deserve an IS certificate!

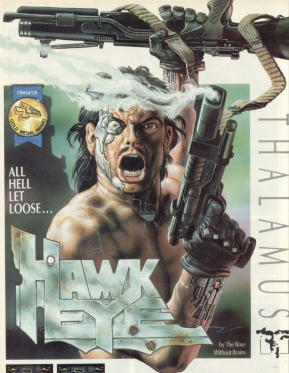
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472 5718.

■ TGM LAB REPORT soon...



Above: another IQ port-screen, showing how the block command (highlighted) has removed the shuttle's nose, and (below) the rotate command has the vehicle floating off sideways (in specular heading for outer space).





ALL
HELL
LET
LOOSE...

HAWK

by The Boys
Without Bears



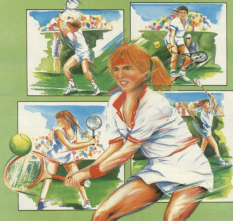
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Screenshots from Amiga ST
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DAVID CRANE

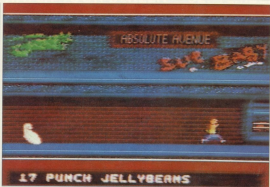
One Man & his

BLOB

Tall
buildings,
crowds of people,
strange aliens —
where else could it be but New
York. TGM's man-on-a-mission,
and Manhattan resident,
Marshal M Rosenthal, jumped on

his joystick and met the illustrious David Crane
(author of Little Computer People and Ghostbusters) to
ask him, among other things, about his latest game A
Boy and his Blob.





Strange things and New York seem to go hand in hand. The movie *Ghostbusters* could only have taken place in New York City, and even *Ghostbusters II* continues this fact. New Yorkers SCOFF at the word, the uncommon place — and tend to ignore it. (You might expect people on 5th Avenue to stop and gawk when a mono-cycled emerges on his wheel from within a revolving door of a busy skyscraper — but not here.)

Considering how strange things in general have gotten (when was the last time you took a really GOOD look around), it's entirely appropriate for New York to be the setting for David Crane's return to producing video games.

Game designers may be proliferating now — with software houses producing dozens of games every month. However, there was a time when the video game was in its infancy — often waiting for one game cartridge or disk to appear created enormous anticipation. *Robotwars* was being advertised in New York for two months before it made its Atari VCS2600 appearance. So it's time for a short video history lesson for those who don't know or remember.

Atari dated it all in late 1979. They did well, after all they had the first entirely to themselves — no third parties existed. A group of game designers left the company to

sell their own; as it were, and the result was Activision.

Crane was one of the shining lights of Activision (back when *Pong* was still considered state-of-the-art) (he started at Atari before going on to be one of Activision's founders). Crane's games included *Laser Blast*, *Petal*, *Total 2* (an animated television series came out of this), *Excavation* (the first multi-event game cart) and *Little Computer People*, among others. Others being *Ghostbusters*, one of the most popular and best-selling computer games ever (reportedly selling over 250,000) — featuring that great opening screen with the bouncing ball as the theme went by.

Then, the dark forces conspired, the planets moved out of line... well, actually Crane just plain decided to get out of the business for a bit — this was in 1987 — to work on other projects (which he still won't talk about). But now he's returned, and through Absolute Entertainment, he's brought his know-how and expertise to bear in *A Boy and his Blob*.

Before we get Crane to answer a few questions, let's take a look at *A Boy and his Blob* (and you ask him very politely about the slants, something like seven feet tall, and with his red beaded loaves something like a Viking warrior who forgot to bring his sword to work that day). The packaging tells the story of

how a young Blob has escaped the tyranny perpetrated on all of Blobstone by the Great Blob King. Arriving on Earth, he befriends a young boy, who agrees to help. The boy must sometimes attain the vital component (staying from Blobolonia — Vitamins).

Besides this task, they both must somehow find a way to reach Blobolonia. This requires the boy to search for a way into Outer Space. Which means penetrating the most secret levels and layers of New York, and Earth.

Fortunately the Blob can help. Bouncing along behind the boy, the Blob isn't exactly a fighter. But he has the ability to change shape, and become a variety of useful tools and devices. This doesn't happen as a gift however, it's necessary to supply the Blob with the appropriate footstuff that will cause the change. And to know what that foot stuff will do, and what the Blob will change into.

Fortunately again, the boy has a knapsack full of jellybeans, the mains of Blobolonia. Tossing one down the Blob's throat causes the change, with different flavors doing different things. So you see that there's a lot to do. You must feed jellybeans to perform special tasks, discover what these tasks are and how to put them into effect when the Blob changes. Plus finding vitamins to store for later. All the while the team are penetrating

Photographs by
Marshall W. Rosenblatt

"It's entirely appropriate for New York to be the setting for David Crane's return to video games"



Digitized pictures of New York's skyline add atmosphere to *A Boy and his Blob*, while below the surface, graffiti covers the subway stations (above) — all the work of veteran programmer David Crane (left), a "sticking warrior who forgot to bring his sword to work that day."





"Somewhat" representative of an Indiana Jones movie poster, and the opening bars of Blob's music sound awfully familiar...

Below: two more Nintendo screens — how long will it be before we see the conversations?



"Just don't give up when something touch comes along..."

strange and unknown areas, the New York scenes, the underground caverns, and somehow find a way to leave all this behind and get to Blobstania. All happening in a game that combines arcade action, adventure and strategy.

Blotting along

Now we turn to David Crane to find out a bit more about the mechanics of the game — and maybe a little about its how to win.

"One of the first things to notice," begins Crane, is that there are digitized pictures of New York being used. This helps to create a quickly feeling — you're not looking at a screen, it's really screens of the New York skyline. The same

continued: "We've learned that tugging a joystick down the Blob's mouth does the trick — but the screen doesn't just automatically land where you want it to go, you have to be close enough to do it right. There's also times where the Blob isn't right behind you, because you're sometimes special or up in the air. So keep in mind that you must learn to control your character through a combination of the joystick and firing button, and that there are lessons to learn as you become more aware of just what happens and when."

"It's also important to keep track of the Blob, since he can't always run as fast as you do and sometimes in a few seconds behind screens appear in whole when you exit the screen or fog."

"It's important to remember that the purpose is fun," notes Crane. "Your character can get hurt and will have to be replaced by another life, but there's only danger to overcome — no extreme violence like in a karate game. Here Crane uses metaphors for the jelly beans. Without going too much away — a Vanilla bean — (yummy). And part of the fun is watching the Blob go through his change — his big fat body shrinking into itself before becoming something unusual, like a trampoline or ladder."

This information is shown on the lower screen, while at the top another line displays information as to the number of treasures found. We hadn't mentioned that yet, says Crane. "Treasures are important, although they are difficult to find and acquire — I guess because they tend to be in remote places or guarded by strange things. Of course these things are at Earth, and not just so strange as what's going on in Blobstania."

Crane has added other innovative features to jump up the enjoyment, one being Point of View. He explains: "Like in a movie, the picture follows the boy around. However, when he does something which goes into another screen (like tugs a joystick at a cliff), the camera will follow the action. It's like in a movie where things are going on all around — it's not as much fun to be limited to one view of one character all the time. Point of View makes it possible to peek into unknown areas without having to take a risk."

Crane notes that this function has been made intelligent — a won't happen in the midst of any sequence where it could prove fatal to lose sight of the boy you're controlling. Speaking of screens, there are hundreds of screens in the game, plus hidden ones that can only be found by investigation and perhaps a bit of luck. This is one thing that helps to keep the game fresh and replayable once you've managed to reach Blobstania and defeat the king —

though it is much more reasonable to use the word P. H. H.

"About doing that," says Crane, "that's where the Williams comes in handy. Once you get to the Blob's planet, you'll be using them in a special gun to defeat the many foes that appear (guess where the gun comes from?). Plan to take an evil, Marmalade, exploding Cherry Bomb, mad Popsicle, plus some of those footloose. Plus some decidedly unfootloose Charming Green Blob Monsters!"

Try and try again

Crane doesn't need to mention what is another concern — that fast animation was given a priority. The Boy even stops when he stops animating. The Blob, on the other hand, has a steady plodding effect that is reminiscent of a head of jelly being shaken (should the jelly ever decide to jump out of the bowl and take off). His eyes blink occasionally, for a definitely comic look, and get a load of how he compares after swallowing a jellybean. The screens are bright and colorful (except in those areas where they are purposefully dark and dingy), whip by quickly, almost too quickly at points where a safe and judicious look is more appropriate.

Any hints for winning? "Just try hard," smiles Crane. "There's a lot of things to do, and it requires lots of skills: reflexes, quick decisions, a fast trigger finger, and plenty of thinking — that can be a lot tougher than any arcade sequence. Just don't give up when something tough comes along." Thanks, David. We were even hoping for a secret level comment, or sequence of screens that would turn us inimitable to those blessed Cherry Bombs!

Crane has designed 4 Boy and his Blob initially for the Nintendo system. Asked why, he replies: "I've designed on many systems, from the Atari VCS/6500 to Commodore 64, to Amiga and ST — each has its own characteristics to work with. This is where we wanted to begin our focus — due to the high demand for game cartridges, and the huge number of people using the console." Crane remarks that it took quite a bit to get the program to work the way he wanted on the Nintendo system. "To accomplish what we wanted entailed our creating a new programming environment from scratch," he says.

Crane's designs always exhibit the sense of humor and fun that should always be a part of any video game. "You may notice that the graphics colour of the title is somewhat reminiscent of an Indiana Jones movie poster, and the first couple of opening bars of music for Blob sound awfully familiar. Blob is a two-manual game, and will be available for Christmas. So start practicing your jellybean feeding now."

WATCH YOUR SCREEN – SEPTEMBER



TM



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ATTENTION

NEC PC ENGINE ANNOUNCEMENT

NEC Corporation, NEC Home Electronics Ltd., and NEC (UK) Ltd (collectively "NEC" hereinafter) have recently become aware that the PC ENGINE is being offered for sale in the United Kingdom.

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CONFRONTATION: COIN-OP

Mark Cowell checks out four new arcade machines and looks ahead to the autumn and Christmas licensed coin-op conversions from the top software houses

US CLASSIC

Think you could beat the best of Lee Trevino, Gary Player and of Seppie? Time, then, to have a bash with US Classic. After inputting your name, you're taken to the tee where a tall dark haired chap is getting clobber awaits for your commands.

The selection of available clubs is shown in a window, and it helps to have some idea which club to choose — all golfers know the length of the hole determines the choice. Choose wrongly and you might end up in the rough or a bunker (or land trap) as Americans know them).

The game's played with a single ball controller. Whizz this as fast as possible in the desired direction you want the ball to whack the ball, and off it goes through the air with the greatest of ease onto the fairway (or bunker...).

Each time a shot is taken the club appears and another should be selected appropriate to your position on the fairway, rough or green. US Classic is definitely one for the golfing fan and all it lacks is independent fate.

FIGHTING FANTASY

Once a year the top warriors on the planet visit the Megaport (no not Peter Dinklage's) aim to battle for fame, glory and loot. You're a tall healthy young fella with a strong right second arm, so what not have a go and take a bash at the title.

After the very nice title screen which explains just what the heck is going on, there's a choice of three opponents to fight: a mythical creature, a lizard and a nasty snake

woman with a decidedly dangerous tail. As soon as you've picked which one of these baddies you reckon you can beat, it's into the arena to take hell out of one another. I was a little disappointed to find that the character movements are limited to swishes of the sword and jumping — it limits your chances of survival because the other guy often has something extra to ensure he. The lizard has a shield, the snake can fly and the snake's tail crushes you to death at the slightest chance (which produces gushes of blood from your character's mouth...).

But when you win a round your character rises to his knees in the air and a large victory message blazes across the screen. It's now up to you to decide how best to spend your hard earned wages, you could buy a new weapon (a sword, mace or battle axe), armour or a healing potion. Whatever, you

only have a few seconds to decide which, then it's into the ring with the next nasty. Overall Fighting Fantasy is an average battle-on-up named slightly by its lack of options. Worth a few ten-penns though.

CRACKDOWN

At the start of the 21st century a group of genetic warriors were created, led by an evil alien who wanted to destroy the world. Earth Defence reckoned on thwarting this plan (of course) and hired their best (if you play with a friend) top operatives into the alien base, there to destroy the mega bomb with which the genetic warriors intended carrying out their twisted plan (see nuclear laughter).

Armed with a laser gun and a limited supply of mega grenades (which act a bit like smart bombs), blast the hell out



It's hard to already know your pluck when you play *US Cavalry* (far left), whereas avoiding a clucking is more to the point in both *Fighting Fantasy* (left) and *Golden Axe* (both above).

of everything on screen), our horses sneak in. The play area is viewed in Gauntlet-style first-eye perspective. The aim is to charge around each screen and locate the red X's pointed on the ground.

When an X is located (using the overhead map placed at the top of the screen), you place a time bomb on the spot. Out to prevent you are the guards; some can only hit you, others possess guns. A swift shot in the pants is enough to turn the toughest soldier to radioactive dust, but a well-placed shot will do the same to you, so beware. Scattered around these are chests, antedoper, then reveals armor, more powerful weapons (the battocks is a dandy) and bonus points. But we can't stand here and chat on the bombs' timers are running out. Place the last one and run like hell for the exit. Some good play in this one and Crackdown is a fun way to kill a couple of hours.

GOLDEN AXE

In days of old when knights were bold and heroes had names like Gillis Thunderhead, Tilus Plegor and Aze Waznor, the stone is set for this second 'n' sorcery romp from Sega. *Golden Axe* lets you play one of the three toughest in a quest to seek truth, justice and

a chance to run someone through with your sword. Before this, there are plenty of chances to do this before the game's through.

As with *Fighting Fantasy*, there is only a jump and light button, but there are a lot more combat moves ranging from the lethal looking 'step of death' decapitation move to literally picking up your assailant and flung him bodily across the screen. Beware of the occasional attacker on a mount, these are usually fire-spitting dragons, or a strange creature called a Chicken Legs which whips you with its tail. Flashes can be turned off if you gain a mount, but if all else fails there are always the magic potions — if you have collected any...

Each character uses magic differently. Gillis can create lightning, Tilus makes frostbite and Aze can call up an earthquake. Depending on the amount of pillars possessed and the skill level of the user, the magic can be useful to dispose of a band of attackers.

Out of the four games reviewed here I must say that *Golden Axe* is my favorite, partly because of the attention to little graphical details, such as the tearing of the sword prior to laying into an enemy, and partly because it's a sucker for a good second 'n' sorcery tale. Look out for *Golden Axe* in your local arcade. ■

Coming into Season

"From the arcades to your home computer" is the usual pre-Christmas software flourish (y). So what's everyone got lined up for us this year?

DOMARK

Following the successful launch of their Tengen licenses with *Wakousetsu* and *Sylestia*, Domark will be releasing *APD* soon. The story of Officer Bob, a copper biling his daily quota of arrests, or facing the fiery wrath of his superiors, you are gently eased into the game with a few filler bugs. But soon enough nastier characters show their faces. We previewed this last month.

Next on the list, *Dragon Spirit* takes you to a mythological age to play a hero changes into a blue dragon by divine intervention. He's hunting to save a beautiful princess from an egregious demon. Find out in late August if our brave hero can save the day.

And round about PC, how time watch out for *Thunder*. This, said and already game, sees two fun driving kids getting off to a jump on a stronger choice of transport — automobile, term, *thm!* *Driver*, the latest racing game to feature stunning light, smoother style graphics. (Domark have the arcade version sitting in their offices 'purely for research purposes' says Mark Strachan, as the name beats my high score), should be out during November. And finally there's *Cyberbait*, a 21st century American Football game featuring very large scoots instead of humans. The release date is set for early next year.



OCEAN

Hot on the heels of *New Zealand Story* (see review on page 84) Ocean have *Cats'et* set for release, where one or two touch and well and mercenary types will be able to vent their violent and social tendencies on a range of enemy soldiers and vehicles.

And the arcade action doesn't stop there: around Christmas you can get *Chase HQ* and *Copwatch: Thunder!* Just in case you've been in outer space for the last six months, *Chase HQ* gets you behind the steering wheel of a Black Panther. Plus nearly all are on the same year (it is, bring them to justice). *Copwatch: Thunder!* probably needs to introduce the sequel to one of 1987's most popular concepts, the monkey (this time with a friend) is back. The reason of speed is the aim, but the usual violent conflicts ensue as the soldiers of fortune yomp around the screen.



ACTIVISION

Activision have a veritable flood of titles set for release within the next few months. Between August and November, *Alien3*, *Blade*, *Super Wasteland* and *Dynasty* (it should get the light of day). The Christmas leggy will be *Power Drift* — not, perhaps, as violent as the hydraulically-powered arcade game.

And there are ladies conversions set for early 1988. The ones we have into are *Galaxy Force* (the hydraulic version of this is worse than *Power Drift*), *Fighting Soccer* (Warrior meets Liverpool. Ut, perhaps, *Hot Rod*, *Sonic* (Mason and Ninja) (Soni).



Thunder from Activision, top to bottom: *Power Drift*, *Alien3* (Bent and Rod)

Robin Candy's PLAYING TIPS



SUPER MARIO BROS 2

Space, it seems, is my final frontier. 'Don't waffle', says my editor, because you haven't the room. And why not? With all this sunshine, who wants to waste time? So here we go, straight in with this month's C&G Star Tip...



(Nintendo)

This month's Star Tips come from Michael Turner who lives in Essex, he's been playing Super Mario Bros 2 for some time and has sent me the complete solution. But that might ruin your enjoyment of the game, so I've only published top tips for the first two worlds this month — more next issue...

World 1-1

After passing through the first door, climb the first beam. Climb on top of the hill (put the piece of grass further to the right). Now throw the power at your feet to the left. Go through the door and pick up the mushroom and the grass. After exiting the substage, keep going right over the waterfall. If you reach a hill with a piece of grass and a POW block on top, put the grass to an extra life. Now keep going right till you come to another door.

Go through the door and up the beanstalk. At the top continue right and go through the door. Put the first piece of grass you come to. Throw the potion and enter substage. Pick the grass to

collect coins. Exit substage. Climb beanstalk — in this section careful climbing is required. Beanstalks with monsters can be tackled by jumping from below onto the monster. If this isn't possible, climb above the monster on an adjacent vine then swap vines and continue upward.

When the music changes you have reached the ceiling with the end-of-level enemy. To kill it jump on top of the Mini Impersonal it fires at you, pick them up and throw them back. These hits are generally required to kill the thing. And once dead the monster leaves a crystal behind. Collect this to progress to the next level.

Bonus Chance Screen

The wheels do not spin randomly. It is in fact very easy to stop the wheels as required. The wheel is to watch for a cherry to appear in the first wheel and learn how often it appears, with this in mind the wheel can be stopped on the cherry.

World 1-2

Climb onto the highest of the three hills and watch when Poptart appears. Just before a second, jump vertically so that you land on Poptart's head. When you're airborne pick up Poptart and you have control of a flying carpet. But move quickly, because the carpet doesn't last long. Head right, throwing Poptart at any threatening enemies. When the carpet starts shimmering, position yourself over some land till it disappears. The first piece of grass contains a potion. Enter substage and get the mushroom and as many coins as you can. Exit substage and go down into the first pit. Get the grass for an extra life. Now exit this pit and enter the next one.

Pick up the key and get out as fast as possible to avoid the shooting stars. Climb out of the pit drop the key and wait for the Piranha to disappear. Then pick up the key again. Run right and open the locked door. Always use the pick-up key and drop-key method to avoid Piranhas.

Throw the two enemies down holes, pick up the grass nearest to the brick wall. Drop the bomb on the lot of the wall that just hit and stand back. Now use another

bomb to destroy the rest of the wall. Climb the ladder and pick the first piece of grass on the left. Throw a bomb against the right wall so that the floor pieces are destroyed. Repeat this twice, using the furthest two pieces of grass. A potter's hidden under the other piece of grass and you use this to enter substage and get the mushroom. Now go right through the door.

Jump onto the mound and go left. Pick up the piece of grass and return right with the potion. Throw it into the middle of the grass and enter substage for the coins. Go right through the door. The end-of-level enemy can be defeated the same way as the previous level.

World 1-3

Climb onto the mask and jump right onto the hill. Head right. At the top pick the second piece of grass to get the potion. Carry the potion to the hill with five blades of grass. Use the potion and enter substage for the mushroom and coins. Head right again. Pick the first blade of grass under the log for a potion and enter substage for some coins. Continue right and go through the door.

Do a running jump up to the rope, then climb up. Take one mushroom block and throw it into the platform above. Take another and jump up to this platform and throw these into the block. Do a power jump. The mushroom can be thrown at the enemy if needed.

Now jump to the platform on the left, then power jump into the middle platform. Continue up to the door and go through it.

Power jump onto the platform, get the key and run out of the room. Go right and drop down till you reach the platform above the one where you found the multi-coin blocks. Proceed along this platform and drop down toward the right. Throw the key at the Shy Guy. Wait a moment then pick it up again. Head downward. Drop through the hole with the rope in it. Fall to the right, and then go through the door.

Go right and get the crystal. Now go through the mask. You now meet the end-of-level enemy — Mouzer. Use the same found in the grass to blow the

wall, then go right till you are in the section beneath Mouzer. He throws bombs either to the far left or just left of you. When the area to the left is clear of bombs stand there and catch the next bomb which he throws. Quickly jump and throw the bomb at the platform on which Mouzer's standing. Hit him three times... and it's on to World 2.

World 2-1

Head right, watching out for the Crabrat — particularly those which jump out of the pits at you. You swim across a hill with four blades of grass, the first blade on the left contains a potion. Enter substage and collect the mushroom and coins. Continue right, jumping over the quicksand, till you reach a door. Go through it.

Dig down in the sand using button B. It's a better idea to dig lots of small tunnels rather than one deep one. Don't pick up any enemies. Go down the ladder and through the door. When attacking the end-of-level enemy beware of the holes either side of the platform. Once again three hits are required to destroy the guardian.

World 2-2

Put the first blade of grass for a potion. Enter substage and collect the mushroom and coins. Go through the first door you come to. There are four blades of grass, the lowest of which is an extra life while the other three are all bombs. Pick up one and do a power jump to throw it left at the wall. Go left and put the middle blade of grass. Collect the potion and enter substage for a mushroom and coins. Now continue right across the desert. Go through the first door you come to.

Dig down till you come to another door. Go through it. You now meet the end-of-level enemy. Use the usual procedure to destroy this one, but beware of the trebuchet.

World 2-3

The first blade of grass contains a potion. Keep going right till you see a red building with a door above you. Jump onto a Beeze



VOYAGER

(Amiga)

Another routine from the Special Hacker. Follow the same procedure as the Blood Money POKEs.

- 10 MEM Writ: All game has loaded then on the options screen press
- 15 MEM Rtl and then the DEL key, you then get the 4th option which
- 17 Rom is a cheat
- 20 John=459159 (Set=0 Mem=05480)
- 25 PCF =+459078 TO 459158 STEP 2
- 40 READ yltz=VRL (M"-y)S

- 50 Set-Set=0
- 60 POKES x,1 NEXT x
- 70 IF Set=Then THEN GOTO 80 ELSE PRINT "Data Error"
- 80 Print "Insert VOYAGER Disk in DPO"
- 90 Print "Press Any Key"
- 100 J0=INKEY\$ IF J0=" THEN 130
- 110 CALL Joke
- 120 DATA 41F8, 50D8, 39FC, 46F8, 5130, 2648, 0132, 405D
- 130 DATA 008C, 39FC, 4871, 505D, 0164, 46F8, 065C, 5C78
- 140 DATA 0084, 267C, 0CFE, 4678, 43F8, 0607, 0608, 505C
- 150 DATA 0145, 1208, 51C8, FFFC, 46F8, 0607, 505A

CHUBBY GRISTLE

(Atari ST)

David White, Bury
When the title screen appears type BLURBAP for infinite lives.



BLADE EAGLE 3-D

(Sega)

Christopher Handley, Glasgow.
To change the level that you start on move the joystick in a clockwise direction when on

SPHERICAL

(Atari ST)

Harjit Singh from Gelsen has sent in these codes for both one- and two-player games.

1-Player

Level 9 = PADACANT

Level 18 = YARMAR

Level 28 = QRCSLAYER

Level 50 = SKYFIRE

Level 75 = MRCAL

2-Player

Level 3 = GHAFHMA

Level 19 = GLEUP

Level 29 = MUPHRELADE

Level 50 = JAOEWIN

Level 75 = GURMBACHACHMA

BLOOD MONEY

(Amiga)

No scanner had the place gone out for more Amiga POKEs than what should arrive in the office but two routines from a hacker calling himself the Special Joker of Gotham City. Type the program into your Amiga (save it to disk for future use), run it and then insert the Blood Money disk. Unfortunately I haven't had a chance to test out the Amiga POKEs because our photography department seems to use our Amiga more than we do...

10 MEM write lives for both players

20 Plus=50505: Three=0 Spec=428 30 PCF =+418 TO 467 STEP 2

40 READ yltz=VRL (M"-y)

50 Plus=Plus=0

60 POKES x,1 Next x

70 IF Plus=Then THEN GOTO 80 ELSE PRINT "Data Error"

END

80 PRINT "Insert BLOOD MONEY Disk in DPO"

90 PRINT "Press Any Key"

100 J0=INKEY\$ IF J0=" THEN 130

110 CALL Joke

120 DATA 29FC, 0088, 5114, 505D, 0084, 46F8, 060C, 39FC

130 DATA 008C, 0084, 505D, 0C46, 46F8, 0607, 0608, 267C

140 DATA 0608, 505A, 505D, 0404, 46F8, 0607, 4130, 39FC

150 DATA 4871, 4871, 3958, 31FC, 4678, 4430, 31FC, 4671

160 DATA 3218, 31FC, 4671, 3172, 267C, 4638, 0268, 0578

170 DATA 4752, 4548, 703E, 39FC, 4678, 7842, 46F8

180 DATA 0408, 5078, 505D, 0084, 0081, 4678, 2C78, 505A

190 DATA 263C, 0088, 0080, 267C, 0CFE, 560C, 43F8, 0608

200 DATA 263C, 0148, 0078, 505A, FFFC, 31FC, 3367, 4671

210 DATA 3367, 46F8, 0608

LOARDS OF THE RISING SUN

(Amiga)

Andrew McAniff from Moxborough sent me these tips on how to achieve Shogun on the master levels of the game.

If you're a beginner read *Mastermind* — this allows you to practise your strategies. To begin with concentrate all your energies on the castle's castle. These tend to fall very easily at the start of a game, being so easy to recruit as many men as you can, especially from the White Plains. If your army is at all strong he may decide to join you. Should he wish to pass unharmed let him — he doesn't pose a threat to your armies or lands early on in the game.

As you've been taking castles in eastern Japan your brother, Yotome, has been causing havoc in and around central Japan. Head at one of your castles for a while. Then go and fight your brother — with a little luck he should be killed in the battle. You then inherit your dead brother's lands and armies. If you don't succeed in killing him, persuade him he's dead. You can now start to conquer the rest of Japan.

Once you have taken the main land make a couple of visits to the Emperor at Kyoto. He should give the sacred scroll and on his first visit the sacred scroll. Around this time keep a watchful eye on the encounter screen. Your enemies will be growing increasingly nervous as your power increases and will start to get to kill you. As soon as you see a message about a single green flag move mouse button, and with a bit of luck the offending general will convert to you.

Your next task is to take the remaining two islands and the last four castles. Send one of your generals to Nagoya, one to Akasaka and one to Matsue. The general who arrives from Nagoya when they retreat to the mainland. When you take the final castle you will become Shogun.

General Tips

Always check your siege skills before attacking a castle. It necessary swap skills with another of your generals. The same applies to sword skills (for skirmishes on land) and bow skills (when defending castles).



WORLD GAMES

(Amstrad CPC)

David Milton, Basingstoke

- 1) Load Barrel Jumping
- 2) Set number of barrels to 20.
- 3) Keep the button pressed while moving the skater's legs.
- 4) When the black flag appears at the edge of the screen, the skater automatically jumps.
- 5) Keep the fire button pressed while the skater jumps over the flag.
- 6) Put the joystick down when the skater begins to fall (keep the fire button pressed the entire time).
- 7) The skater lands in front of the barrels. You can take your finger off the fire button now.

DUNGEON MASTER

(Atari ST)

Mark Lawrence, Basingstoke
Before using this cheat make a backup of the file START.PRG on the Dungeon Master disk in case you want to play the game without the cheat. Insert the Dungeon Master disk into the drive. RUN the program. Once the game has loaded you should have infinite health and strength.

- 10 REM ***** Cheat Routine for
- 20 OF TCM (BASE) 1: DIM
- 40 DEF SEG=0: REM remove it
- 60 FOR N=1 TO 5: READ B:
- 80 DATA 00000, 00000, 00000, 00000, 00000
- 100 FOR N=1 TO 5: READ B:
- 120 DATA 00000, 00000, 00000, 00000, 00000
- 140 FOR N=1 TO 5: READ B:
- 160 DATA 00000, 00000, 00000, 00000, 00000
- 180 FOR N=1 TO 5: READ B:
- 200 DATA 00000, 00000, 00000, 00000, 00000
- 220 FOR N=1 TO 5: READ B:
- 240 DATA 00000, 00000, 00000, 00000, 00000
- 260 FOR N=1 TO 5: READ B:
- 280 DATA 00000, 00000, 00000, 00000, 00000
- 300 FOR N=1 TO 5: READ B:
- 320 DATA 00000, 00000, 00000, 00000, 00000
- 340 FOR N=1 TO 5: READ B:
- 360 DATA 00000, 00000, 00000, 00000, 00000
- 380 FOR N=1 TO 5: READ B:
- 400 DATA 00000, 00000, 00000, 00000, 00000
- 420 FOR N=1 TO 5: READ B:
- 440 DATA 00000, 00000, 00000, 00000, 00000
- 460 FOR N=1 TO 5: READ B:
- 480 DATA 00000, 00000, 00000, 00000, 00000
- 500 FOR N=1 TO 5: READ B:
- 520 DATA 00000, 00000, 00000, 00000, 00000
- 540 FOR N=1 TO 5: READ B:
- 560 DATA 00000, 00000, 00000, 00000, 00000
- 580 FOR N=1 TO 5: READ B:
- 600 DATA 00000, 00000, 00000, 00000, 00000
- 620 FOR N=1 TO 5: READ B:
- 640 DATA 00000, 00000, 00000, 00000, 00000
- 660 FOR N=1 TO 5: READ B:
- 680 DATA 00000, 00000, 00000, 00000, 00000
- 700 FOR N=1 TO 5: READ B:
- 720 DATA 00000, 00000, 00000, 00000, 00000
- 740 FOR N=1 TO 5: READ B:
- 760 DATA 00000, 00000, 00000, 00000, 00000
- 780 FOR N=1 TO 5: READ B:
- 800 DATA 00000, 00000, 00000, 00000, 00000
- 820 FOR N=1 TO 5: READ B:
- 840 DATA 00000, 00000, 00000, 00000, 00000
- 860 FOR N=1 TO 5: READ B:
- 880 DATA 00000, 00000, 00000, 00000, 00000
- 900 FOR N=1 TO 5: READ B:
- 920 DATA 00000, 00000, 00000, 00000, 00000
- 940 FOR N=1 TO 5: READ B:
- 960 DATA 00000, 00000, 00000, 00000, 00000
- 980 FOR N=1 TO 5: READ B:
- 1000 DATA 00000, 00000, 00000, 00000, 00000

LEISURE SUIT LARRY 2

By popular demand here are some more tips for the second Leisure Suit Larry game, this time from James Hammond of Gloucestershire.

- Boat Scene**
- 1) Enter room 1 and get fruit.
 - 2) Go behind the dresser and take your clothes off.
 - 3) Leave room, go to room 2. Get in the pool and swim.

- 4) Put some sun screen on and then sit down on the sunbed.
- 5) Get up and visit the pool area.
- 6) Go back to room 1 and put your clothes back on. Leave room.
- 7) Enter room 5, get the dip

- 8) Enter room 3 and sit down. After the sequence has finished leave the room.
- 9) Enter room 4. Walk to the lever on the right of the captain. Pull the lever and leave the room.
- 10) Go to place 5 and get in one of the life boats. 11) Put some sunscreen on, and then use dip.



- Resort Map**
- 1) Enter scene 4 and get the flower.
 - 2) Talk to the man in the restaurant and then sit down.
 - 3) Go over to the food display and stand next to the table on the wall. Get the knife and leave the room.
 - 4) In the jungle type "TALK

- "SHORTCUT" or "TAKE CLOTHES OFF".
- 5) Once in the room go over to the bed and get the clothes. Then go to the bathroom and get the soap. (Should the map come in type "H... LADY" but you must save the game at this point because in the end you will be shot.)
 - 6) Leave the room. Go to the

- 7) bathroom and sit down.
- 8) Leave room. Go back to scene 1 and type "GET SOO-TOM".
- 9) Enter scene 4, leave the restaurant. Enter room 5, go to the far wall around the corner and take your clothes off. Then get the soap in the pool and leave the room.
- 10) Go to room 7 and sit down. When the sequence has finished leave the room.
- 11) Go to room 3, walk to the right and you shouldn't be recognised by the KGB agents.

SUPER MARIO BROS

(Nintendo)

Stephen Hoyle, Basingstoke
To get a continuous game spinkick down the 'B' button while pressing start when the title screen appears.

ALTERED BEAST

(Sega)

David Jackson, Hammersmith
On the title screen press the

top left direction button along with both fire buttons. When you start the game you arise from your grave with five energy bars.

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SHINE & GRAB 2

A SLIDING SOLUTION



Colour or Line Artwork:

As long as you have a mono video camera, or a Super VHS camcorder, with a reasonable copy stand, you won't encounter any problems in achieving reasonable results. The main two things to watch out for is picture distortion and lighting. Most digitising cameras are supplied with a wide angle lens, which creates an unreasonable amount of distortion. If you're into photography (owning an Instamatic will do), you'll know that the smaller the viewing angle, the smaller the image distortion will be. An ultra wide angle lens such as a fisheye displays a completely circular distorted image, while a tele

lens displays a near-perfect geometry thanks to its near-parabolic lens angle.

(So why the choice of a wide angle lens on the digitising camera?)

Well, you'll normally want to digitise artwork up to and over A4 size, which means you have to scan a picture height or length of 300mm at least. If you were to have a lens with a big focal length (ie a small lens angle) your copy stand would

have to cope with an enormous camera-to-artwork distance. The angle on your standard lens is approximately 45 degrees, which gives you a camera-to-artwork distance equal to the artwork length, ie approximately 300mm for an A4 size. If you don't want to put up with an image border looking like an old Pollock style jelly, you have to dump the standard lens (usually 8.5mm focal aperture) and go for a big focal length

A famous older town featuring the brightest brains in computer magazine publishing. Yes, you guessed right... we hope.

Digitised from a 35mm neg with an 85.5mm video lens, the original wide angle shot gets an extra warp treatment. Colours corrected and heavily DEDIBIT sharpened to create results and grain effect (if nothing went wrong with the printing process)

ALSO IN THIS ISSUE OF CENTRE BYTES...

EMULATING

New steps of the art hardware makes state-of-the-art software possible for Amiga and Atari STs. We look into emulating IBM ATs and XTs and Macintoshes on the popular 16-bit machines. Plus a TGM Lab Report on A-Max, a hardware add-on which lets Amiga users run highly sophisticated Mac publishing programs

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EMULATION ST Amiga to IBM Mac
INFORMATION DESK
INDEPENDENT REPAIR SERVICES
TOOLBOX — those useful little bits and pieces
CLASSIFIED ADS
READERPAGE
BUT HARDWARE GUIDE
MEL'S THIRDA GAZ RESULTS

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GUARDRAILS!

Not for sale this one-off sports car on Triumph basis. Digitised from a 35mm slide with high contrast and sharpness settings.



lens of, say, f-25mm or f-50mm.

Using the camera on the copy holder to a horizontal position and fix the artwork in the wall at a distance of 1 to 2 metres. Video camera manufacturers such as Panasonic won't supply special lenses. If you own the very popular Panasonic WV1410 camera,

find a good video equipment shop which can provide you with the necessary 2/3" C-mount lens with manual iris. Expect to pay anything between £40 to £100 for the lens (old rule: the bigger the focal length, the bigger the price).

Fast! Please let there be light! Nothing more than is dispensing that. Only problem is colour digitisers are quite finicky about the colour temperature of the light, is whether you use normal, colour corrected, halogen or fluorescent light sources. To avoid wasting hours of your time and great quantities of pound notes, try using miniature fluorescent tubes or pinch the

miniature halogen lights which illuminate your slide set collection. Safely, your video equipment store can provide you with special video lights, although they may want to sell you either portable battery operated camcorder light (expensive) or 1,000W plus flood lights. Other than that, go to your Do-It-Yourself store and buy the shelf fluorescent tubes used in bathrooms and kitchens. They're not colour corrected, but you can compensate the bluey tinge with the DEGRETEL colour control slides. When setting up the lights, make sure you avoid hotspots. Use four tubes or less tubes to ensure even lighting across the artwork and set them at a large enough reflection angle to avoid shiny patches on the artwork (not easy to overcome).

SLIDES AND NEGGS

These are probably the easiest media to use. There's an abundance of slide copiers available on the market, but very few that

provide adequate performance. Avid systems, which require the slide or neg to be back-projected from a normal slide projector onto a halfmirror, onto which your video camera focuses, as they are very difficult to set up and you usually end up with a counterweighted illumination pattern. Better use the tube-shaped slideholders which screw onto the camera lens. They require you to organise your own lighting, but if you have a slide projector, you have a halogen light source, which you can point directly onto the diffusor which is normally located at the rear extremity of the slide holder. The problem with these units is that they don't provide for the existence of a mechanical colour filter wheel in front of the lens and you therefore lose the colour system (convenient usually don't feature such contrivances).

A further drawback is that they don't provide enough control over the picture format, is overexposed and subject centring. If it's versatility you're looking for, construct your own slide copying system by ransacking your old photo kit. If you can obtain a piece of milky-white diffuser glass (or plastic) you're in business. A bit of clever cardboard engineering generates a slide holder with the diffuser glued in place between light source and slide. Ideally you should obtain a mirror bellows guide or any solid housing device, which can be positioned on the copystand above the fluorescent/halogen light source to position the slide or neg horizontally at a correct distance to the lens. By cranking the video camera up or down the copy holder column you can adjust the picture take on the monitor. Don't forget to leave a gap between the lens and your copystand for the colour filter to do its rotation cycle.

The deliberations on the focal

length of the lens apply here as well, but the difference is that the original size is only 35x44mm (assuming you lend yourself to the popular 35mm format), which means that using an 180mm lens not only provides you with an undistorted image, but also gives you a generous 100mm distance to the lens — enough leeway to close in on an interesting subject and magnify part of the picture. To this purpose the whole unit can be freely moved over the copystand for best picture composition.

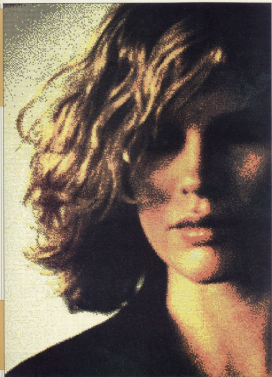
VIDEO SOURCE

A large range of applications fall under this heading and possible video sources are TV, video recorders, camcorders and computers. The major drawback of DEGRETEL is that it can't cope with colour modulated video signals without extra hardware. Although the first Amiga-based colour image grabbers are at long last coming onto the market, there will be a large number of DEGRETEL users who balk at spending in excess of £500 for these new devices. They may however consider upgrading their DEGRETEL system so it can handle colour video sources. This is going to be the subject of next month's article.

Right: PhotoLab showing early Kim Masinger out of all proportion! This large picture is only one quarter of the digitised image, which can be re-sized, pan-elled, at the top of the page.

DEGRETEL GOLD (Newark) RRP £149.95
DEGRETEL (Newark) RRP £89.95
PANASONIC WV1100 VIDEO CAMERA w/o lens RRP £199.95
HITACHI HV100 VIDEO CAMERA w/o lens RRP £208.00
8mm VIDEO LENS with manual iris RRP £49.95
16mm VIDEO LENS with manual iris RRP £137.30
COPY STAND RRP £59.95
KODAK 4000 INK JET PRINTER RRP £1497.50
KODAK CLUT BAKULI READER RRP £255.00
KODAK 4000 STARTER PACK (roll holder and complete set of consumables) RRP £149.95
KODAK CLUT SHEET PAPER (500 sheets) RRP £29.97
KODAK 500 x 750mm PAPER ROL, RRP £19.99
KODAK OH TRANSPARENCY PACK RRP £26.71
KODAK MAINTENANCE CARTRIDGE RRP £19.33
KODAK INK RAINBOW PACK RRP £19.33
KODAK BLACK INK RRP £9.17
KODAK CYAN INK RRP £9.17
KODAK MAGENTA INK RRP £9.17
KODAK YELLOW INK RRP £9.17
DELUXE PAINT 5 (Electronic Arts) RRP £79.99
DELUXE PHOTO LAB (Electronic Arts) RRP £89.99

Available from any specialist computerstore or (in design) direct from TGM SHOPPING.





XEROX 4020 INK JET COLOUR PRINTING

Setting up the printer is a doddle if you follow the instructions provided in the manual and there's no point going into the nitty gritty. Make sure you have the Workbench 1.3 printer drivers, as there's a major improvement in speed and print volume options over version 1.2 drivers. Have a well clearing cloth to hand for the first print-out — when you do an A4 size print the paper has to be correctly positioned on the printer glass, which can only be done by trial and error, leading to just the picture printing directly on the glass. Wipe the paper about an inch to the right of the printing edge and you might not have to clean up the mess.

The print preferences allow you to set all the necessary parameters including lab effort and density etc. Operate with

density 1 or 2 depending on whether you can afford the extra ink spent only the paper with setting 2. The sub-commands, InkAidNo 1 and 2 allow you to mess about with scaling, dithering and smoothing controls etc. Color Correct RGB reduces the amount of possible shades achieved by dithering, but provides better rendition of the screen colour. The results obtained are simply excellent and can only be beaten by much more expensive thermal transfer colour printers.

ALL ABOUT YOUR VECTOR ADVERT

For those fortunate enough to be able to consider purchasing the XEROX 4020 colour ink jet printer (P/P/P of £14,975.00), here's a rundown of the machine's running expenses and other quirks — assuming, of course, that it's mostly used for colour graphics work. It's highly unlikely that anyone would purchase it for text applications only!

The consumables costs split into paper, ink and maintenance fluid. By far the most expensive of these items is the ink. Although this printer allows you to top up each of the four colours (cyan, magenta, yellow and black) separately, unlike some other ink jets (e.g. PictaJet), you'll quickly find your graphics printing being regularly interrupted for topup requests for one colour at a time. At least you're not forced to throw away a multi-coloured cartridge with plenty of ink still left in it.

Top on the popularity list is the black ink, as most shades are heavily mixed with it to give a good dense appearance to the printed image — about a



Left - a detail of the England-based PhotoLab poster of Michaela Porter (see last month's article). Thanks to anti-aliasing, picture detail exceeds digitised resolution. Above: screen shot of the digitised Ludlow street used in the printed title picture.

4:1 ratio, is by the time you asked to topup cyan, magenta or yellow, you will have probably done four stops of black. The ink supply comes either as a Maintenance Pack of 500 cartridges for the four colours, or you can acquire single-colour packs of 2 x 500 cartridges. Assuming full colour A4 prints, expect to get between 15 and 20 copies with one black cartridge and between 50 and 60 for the other colours — a cost of about 40p for each A4 page.

The consumption of the maintenance fluid is more difficult to predict, as it depends on the amount of times you switch the printer on and off between printouts. The XEROX 4020 performs a lengthy wash routine on startup and shutdown, or an command by pressing the receiver switch at the back of the printer when clogging occurs, and this is the only time it uses maintenance fluid. Add another 5p per copy to be on the safe side.

This leaves the paper cost, which varies depending on the paper format you use. Best cost performance is achieved with single-sheet A4 paper at 5.8p per sheet. Roll paper works out at an amazing 11p, assuming it cuts waste of only 2mm. It would appear that XEROX has structured the paper cost in favour of roll sheets, so that you will be inclined to purchase their roll sheet feeder accessory, particularly as it's fairly to load out sheet paper into the printer. So the total cost of a page adds up to 50-60p per sheet (and don't forget the meter is running even if you don't get the hangover right first time. On the plus side, think what it would cost you to have an A4 photographic print made!

APPLICATION SOFTWARE

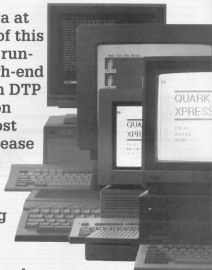
The Aramis is probably the only machine to include colour print drivers in its basic configuration. All application software makes use of the standard drivers and compatibly is thus assured. There's no particular price of software to recommend for the hard copy output, the obvious choice is DOWVIEW itself, as you can offer your digitised image while its still in 24-bit RGB form in memory and make the necessary corrections on brightness, contrast, saturation, colour balancing and sharpness to adjust for a perfect printout. Always remember to optimize for a perfect printout, even if the screen representation may look impaired.

DOWVIEW is also the only graphics software to provide a full display of a high resolution interlaced screen. DPaint 1.2 and 3 will not allow this and convert on loadup to medium resolution display, which has to be scrolled around approximated under a special menu command. On the plus side DPaint has an excellent palette control, and it there's any retooling to be done, DPaint's the one.

Favourite choice must be Deluxe PhotoLab with its incredible poster program allowing you to print massive posters by splitting the image into pages or strips, which can then be tied and assembled on a carrier which makes this program a real idea hit in its excellent and amazing feature, which convert the 'jaggies' and creates the impression of a higher resolution than actually exists, important if you consider a resolution of 640 x 512 spread over metres of poster!



The Amiga at the front of this picture is running a high-end Macintosh DTP application with almost effortless ease — it's all part of the latest computing rage — time to...



Emulate

Emulation means to 'become like' — to do exactly as the other computer does in all things. As Paul Daniels might say: 'Computer, become an IBM... now turn into an Apple Macintosh.' Now you too can say Hey Presto! and turn your ST or Amiga into any IBM, Mac, or piece of furniture you like. Marshal M Rosenthal grabs a magic wand and announces his own Emmys from America, and Franco Frey provides an a-mazing TGM Lab Report on A-Max, the add-on which means major Macintosh electronic publishing packages like Quark Xpress and Adobe Illustrator 88 will run on an Amiga. Some Amiga-only mags have said A-Max can run PageMaker 2, but that's in the Mac dark ages — you have to read TGM to discover the really astonishing truth...



Choosing a computer is very personal. Sometimes it's easy — there's a fantastic game available only for the Computrill, or a great deal on the Budgetbuster. The Atari ST and Amiga computers are great machines, but sometimes it's tempting to look towards the so-called 'real' computers, the IBM and Macintoshes which have so much respect — and software. What do you do? You can go out and buy an IBM or clone for an extra £500, get a Mac SE for over a couple of thousand... or you can emulate.



Atari ST — IBM XT

Atari's Garden's PC-Dino has been a big seller in these exciting MS-DOS compatibility. This software (IBM emulation package) enables the ST to become an IBM clone. First you use a special Menu program which sets up the parameters; here you can specify which drive will be A and B, how many characters of text across the screen, default colours for CBIK mode and even simulate a serial mouse. And, of course, you can designate the printer and serial ports. Once this is saved as a configuration file, you run and the program and then run PC-Dino.

The disk drive will whir and stop, then ask you to insert an MS-DOS operating system disk (one of the helpful things is that the Atari 3.5-inch drive is the same as that on an IBM — you can also install a 5.25-inch drive). After the disk spins, you are presented with the famous, and boring, *Amiga* screen.

ST users can have one BIG complaint about PC-Dino, though: it runs slow, slow, slow, about 15% the speed of a 4.7 MHz XT. This made it very tough when displaying graphics, and nearly useless for games.

Also as comes PC-Dino II. The speculation over the **HARDWARE** device has been going on for a while — and many thought that it would be a plug-in cartridge. A/O's president, Bill Teal, has the latest on the realities of version II.

"We decided to go with an internal board," begins Teal, "because it's easier to leave alone than having to deal

with plugging a cartridge in and out. The board is only 4½ inches and fits inside all the STs, even those 630s that have installed added memory devices. It's a simple installation that takes about 10 minutes. All you do is follow the instructions for your particular ST — remove the cover and take off the sheathing over the motherboard. There's no soldering or wire-cutting — just follow two simple steps: once the 6300 chip, place the board down, and close up the computer."

Teal notes that custom gate arrays are used to address an IBM XT clone, a clone that is dormant until the PC-Dino II program is run. The program even diagnoses the bugs that are found in the original computer for greater compatibility.

"The advantage now is speed," says Teal. "In fact, we had to have special programs to slow it down to the 4.7 MHz of the XT so that games and the like wouldn't run too fast; they'd run so fast that the system got, while Sublight slows it down. What to talk about that? How about running patcher than an XT 10 MHz Turbo?"

Teal is quick to point out the few negative sides. Japanese support is not included, and it isn't compatible with the newer AT series, not with a run CBIK or 286 commands. But, he says, 90% of the software out there uses the XT standard, and will work on his system.

"Colour is still in the realm of monochrome and few colour CBIKs, but we've been working on this one," com-

ments Teal, who points to Atari's Garden's policy of free software upgrades.

So what about those upgrades? "Oh, yes," he replies. "We are completing four functions that should be available before the end of the year. The first is 16-colour CBIK support, which hasn't been seen — remember that a lot of CBIKs are activated using storage 'looker' by the programmer, and this could cause all kinds of confusion. Second is that we're going to speed the 6300 board, to an expected memory system that will allow 640K of RAM, multi-tasking and so on. This expected memory, by the way, is what lets us do CBIKs."

Functions three and four are

equally interesting. PC-Dino would let you use an *Amiga* compatible printer, says Teal, but PC-Dino II also supports the Atari Laser (An *Amiga* 8000 emulator). The final addition is more; IBM MIDI support for the Atari's MIDI-101 synthesizer through Atari's built-in MIDI ports. That should make a lot of people very, very happy. Teal is also quick to state that the software-only version of Dino will continue to be sold.

Having seen PC-Dino II in a 104000, with excellent results, we speak with Teal's statement above. If you want an IBM clone, forget about buying a new machine — the ST and PC-Dino II is the way to go.



Atari ST — Apple Macintosh

Now for the Mac, which is a lot better. David Small (Macquies by Small) created the Magic for some time back. This was a cartridge which plugged into the ST port, and emulated a Mac through software — inside the cartridge was the Mac's operating system ROM chips. Subsequently, since then brought us to Spectre 133 — again a cartridge, but not containing the ROMs necessary to use the Hypertext (the main Macintosh database software) and other applications. Here's how you get to the Mac SE on a mag, black and white screen that the Spectre 133 emulates so well.

You can leave the cartridge plugged in — nothing will occur until you activate the program (it's being the most current version). Up will come a configuration window to set parameters of memory, sound implementation, and formatting of disks (including hard disks). The sound driver gives you all the bells and whistles you'd expect, and the new software lets the ST act of duplicate the digitized sound quality of a real Mac (Small really cared himself here because this has to be done through software).

Now you let the program go. After a short bit, you are told to insert a Mac Startup disk. Mac disks have to be

formatted to this format to work, because they're truly bizarre — a Mac drive speeds up and slows down while it's working. This is why there's the formatting commands, because you must use the special Spectre format. To get program over to this format means connecting the ST to a Mac, or downloading a program using the ST and then running a conversion program. The only alternative is the Translater One device that lets Mac disks work in the Atari drive. But it doesn't always work, runs too much like the MIDI ports, and is extraordinarily slow.

To continue, the Startup disk performs, and *WEM* there's the Mac welcome screen. A few moments later the Mac desktop makes its appearance. This screen looks best when using a monochrome monitor — is that you get a lot more picture area as a bonus. Using a colour monitor is beside the point, mostly due to switching which lets you scroll between a two-screen sized image stacked vertically. But this eats up memory on a 104000 that keeps Hypertext out of the picture, and text looks pretty awful. Anyway, now you do whatever you want, with a few rules peculiar to the Mac and Spectre. So what's so complex?

Just that you can't use Mac disks. But, that's being changed, because Gadgets are releasing their G2K card, standing for Group Coded Recording, this new product takes care of the funny Mac data direct. Just pop a Spectre or Mac disk in a drive and go for it! G2K plugs into the cartridge port and takes the Mac ROM chips that were in your Spectre out (ROMs can't be sold by Gadgets but are available through other vendors). A cable is then attached from the G2K to your external drive, or to the external floppy port if you're only the littlest user.

Using the cartridge port enables the transfer of information at a rate of one million characters a second. That pretty much says it all. Speed is now the norm.

Printer support on a SpectreG2K includes Epson compatibility, the popular HP DesignJet you have to purchase a Mac printer driver for those), plus the Atari Laser printer (Gadgets are still working on getting UltraScript to kick in — give Dave a bit more time). Gadgets also send out a newsletter on an irregular basis that is full of timely and useful information.



Amiga — Apple Macintosh

A-Max, by Readysoft, is similar in many ways to the Spectre card. It's also a cartridge which contains the G2K ROMs, and plugs into the computer — in this case to the Amiga's external disk drive port. Unlike Spectre, A-Max has two connectors on the back, one for an Apple ROM external drive and the other as a pass-through for additional Amiga drives. The choice here is to either use the Apple drive for normal Mac disk use, or transfer the software as you would do with Spectre.

Let's step aside the similarities to Spectre (like configuring printer and serial ports, and focus on the differences. First, a number of video modes are supported: 640x400 interlaced 60Hz with varying, 512x342 interlaced (Mac standard), plus 1024x576 to use with the 4200 or Western Viking high-res monitor. PAL support is included for screens up to 640x412 interlaced. But where the all new setting is to use with the new Commodore Extended Chip Set (ECS), which not only lets you use a lot more memory for running programs (ECS allows one meg of chip RAM), but also gives you a 640x400 320x200x16-bit picture!

David Foster, President of Readysoft, continues to note the advantages of A-Max on the Amiga. "A-Max has many special features of great value," he begins. The

Professors program lets the user emulate an Apple ImageWriter on 8 and 24 pin Epson compatibles, and if you're a 80000 in the Amiga, A-Max will use it too — providing you're the 100K ROMs. Besides doing the copying being sound and letting you change preferences within the Mac startup environment, it's also worth mentioning that you can 'hard write' a 500/200 so that it will use one meg of continuous memory even though you're not the new chip set, and there's a built-in RAM disk too. Foster also notes that the cartridge can be left connected all the time, and that A-Max will also read Mega file and Spectre disk formats (don't rock the other way however).

Amongst the pleasures, A-Max is able to use a colour monitor to get that interlaced full screen (not having to use a smushed up roiling image as on the Spectre/G2K — or attaching a monochrome monitor). Two disadvantages do exist, though, one being that you can only read information from Mega HardSpectre disks, the other is that A-Max doesn't support hard disks.

Hopefully these two areas will be addressed soon (in fact I have just received a software upgrade to correct minor bugs in the startup programs — Readysoft aren't sleeping). These two points aside — A-Max does just about everything you could ask for in a Mac emulator.

Amiga — IBM AT

The Amiga can also emulate an IBM, and does so using an internal hardware card from Commodore called the A2280 Bridgeboard. This fits a slot in the 286 series, and provides full AT class BIOS/CMOS compatibility. The board is activated by running a special library file called *Amos* — and can be used concurrently with the Amiga, this because of the computer's extraordinary ability.

The Bridgeboard is really an IBM AT clone, with a 60286 CPU chip (running at 8 MHz), one meg of on-chip RAM, and a sector for an 80287 math coprocessor. Besides coming with a 1.2 MB 5.25-inch floppy drive drive (which can be installed inside

the Amiga 2880), a hard disk can be shared between MS-DOS and AmigaDOS. And the Amiga license can also emulate a Microsoft mouse.

Use is simple and exactly as you would think when you're inside an MS-DOS window — graphics run at normal speed as you'd expect, although the Bridgeboard can only display monochrome and VGA graphics.

One must keep in mind, though, that you could buy an IBM clone for less than the card — Commodore's even sold IBM clone cards for about half the retail. But there's nothing like watching two different computers running together, and it's a bit easier on desk space for sure!



Product Information

■ **A2280 Bridgeboard:** Commodore Business Machines (UK), Commodore House, The Pavilions, Clarendon Road, Manchester, Salford M6 8TA. Tel: (0616) 770000. ST version: £480.00 AT version: £765.00

■ **A-Max:** Readysoft: Imported under license by: Renaissance International, 4 The Pinnock, Leighton Worth Trade Centre, Basildon, Essex S70 8JZ. Tel: (0206) 841130. £134.95 (ex VAT), £249.95 (inc VAT)

■ **PC Drive II:** Areata Clarke, 351 Palm Point Drive, Jacksonville, Florida 32216. £299.95 (US price)

■ **Spectre/G2K:** Gadgets by Email, 410 West American, #110-212, Lindero, Colorado Springs. £199.00 (US price) G2K: £299.00 (US price)

• Grey imports are also available from other outlets in the UK

Fully Professional Electronic Publishing is here on the Amiga. How? Turn the page to read the TGM Lab Report on A-Max and how it can run the two most important Macintosh publishing packages



AMIGA DONS A MACINTOSH

Everybody put up their hands who has had the slightest yearning for a Macintosh (preferably a MacIIx)? Thought so, chomp your hands.

But I bet anyone who's received the price list stage will have been convinced of the unlikelihood of ever being able to own one. But what about an Amiga in Mac clothing (or is it a Mac in Amiga clothing)? Impossible? Not so says Planity Soft Inc and goes on to perform a miracle. And it is the appearance of the A-Max Mac Emulator: an optical system created by a lot of hot air? Let's take a closer look at this hybrid and find out.

Anyone expecting to invest in a 6134.65 Mac Emulator and to be a proud owner of a Mac emulator will be sorely disappointed. As with all good things in life, a Mac IIstyle is not

cheap and easy to come by. A quick read through the manual confirms that there are a number of hurdles and obstacles to be overcome.

For a start, the light gray A-Max unit which plugs into the external disk drive socket of the Amiga comes with two conspicuously empty IC sockets. This is where the two Mac ROMs should be fitted. Well, they are not supplied with the base unit, and get.

Entertainment International Ltd — the UK importers of A-Max — can supply them to you at extra charge. Total price of A-Max with the 128K ROMs is £249.95. Still, a small price to pay for total Macintosh.

Although there's a choice of fitting the old 64K ROMs instead of the new 128K ROMs, it's recommended to use the new 128Ks because the old ROMs

won't allow you to read the new system disks under the HFS filing system and won't cope with 640000000 accelerator boards. A Hard Disk II file is included in the A-Max utilities disk which overcomes this problem, but you're limited to System 3.2 or later! (Later Mac IIstep is System 6 — fitting a System 3 or earlier is likely to be difficult.)

What other hidden extra costs are there? None really, other than the fact that you may want to overcome the disk drive incompatibility by connecting a standard 800K external floppy disk drive, otherwise you have to cope with standard Amiga 3.5" drives using the special A-Max format (which incidentally cannot be read by a Mac drive). You can however read Stage Software's 128 (Acad ST Mac Emulators) formatted disks supplied by your Amiga ST supplier,

but you can't write to them.

Also you have to start up first time with a Mini Transfer disk created on a Mac, which is required to transfer across the Mac System and Finder files necessary for booting up the Mac environment on the Amiga.

Which brings us to another minor problem! First of all, you're not really supposed to be printing Mac software, even if you do have a friendly Mac owner to hand. In fact, Apple are well known to be very aggressive in the defence of their property and quite justifiably so. So if you are going to run Mac software, system or applications, be sure you acquire it legally! Assuming you have purchased the required items, you still need a friendly Mac owner to help you put across the System and Finder files to your A-Max. Mini Transfer Disk (MTD). Easy? Not quite so. The MTD is limited to 670K and you MUST leave the System and Finder files for a bootable start-up disk. Note: System and Finder files may easily be of megabyte proportions depending on the amount of Fonts and Gifs (see panel) attached to the System — fortunately these can be stripped to a bare minimum by removing all unnecessary items for initial boot-up. However, this still leaves just over 300K when you use a System v3.0 or above. Your only option is to find an older system (3.2 or lower) in order to fit the necessary files.

Having achieved this, things ease up. A-Max lets you format A-Max disks on the Amiga 3.5" drive and provides you with every possible option of disk and file transfer to and from Mac and AmigaDisk. There's a better way if you're seriously considering running Mac applications on your Amiga — save the hassle and buy an internal Mac driver! Details provided below.

So we have it. How does it look on the Amigalet? The Amiga's format is in the usual style 18 icons in Workbench. The A-Max Startup program on the A-MAX PROGRAM Disk displays the startup preferences window. This is where video, memory and print options are chosen. They may be saved for future boot-ups. From here it's straight to GO MAC and after a lengthy setup time the Mac boot screen appears. You're now in Mac mode! You have the best chance of selecting your preferences by pressing the right-hand mouse switch and changing most of the preferences set initially (this gives you the chance on Mac) should you select the Mac with changed options without having to reselect

VIDEO OPTIONS

The Mac boot-up occurs in whatever screen mode was set in the preferences menu. You may choose between the Mac standard format of 640x480 pixels or a 640x320-pixel mode. The implementation of this format on the Amiga can be set with the Video Mode, which determines how the Mac screen is displayed on the Amiga.

Without any special hardware you can choose between interlace mode, which displays the entire Mac screen, and non-interlace, which splits the Mac screen vertically in two, displaying only the half in which the cursor is positioned. The A-Max controlled screen follows the cursor position automatically either by fast scrolling, slow scrolling or by paging depending on the selection you make. The only problem left with the speed ratio: the display is vertically stretched (2:1), but it's either that or live with interlace flicking.

A-Max caters for two more video options, both requiring extra hardware. If you install Commodore's Extended Chip Set (it's available here in the UK), you can operate with a non-interlaced display of 480 lines, or 360 lines interlaced — assuming you're prepared to purchase the appropriate monitor of course. Other than that, you may have your eye set on the A2024 or Viking Monitors full-page monitor, which provides a resolution of 1024x600 in A2024 mode.

PRINT OPTIONS

The Mac has two serial ports and no parallel port. One is the modem port (the other a printer port). You have the choice of configuring the Amiga serial and parallel ports to either of these Mac ports. Printing on the Mac is done either by Postscript in the LaserWriter through the AppleLink network or by the Image Writer. Provision is made to hook ImageWriter emulation to any of the two ports. However, even if you do have a Postscript laser printer connected to your Amiga, you won't be able to print directly from any software applications. First you need to intercept the print routine and create a Postscript file on disk, which can then be sent via a File Dump program provided on the A-Max utility disk to a serial or parallel port, or sent to a Postscript bureau for typesetting.

the Amiga) Your Mac may now be booted by inserting either the MTD or a full-size A-Max system disk into the Amiga drive, or

— AAAHH! what a luxury — by inserting the real floppy Macosy in the external Amiga drive. A-Max is an excellent Mac



Essential for the serious user: 300K Macintosh 3.5" external drive, with Adobe Illustrator 88, Quark Xpress and A-Max utilities disk.

MEMORY OPTIONS

A-Max lets you allocate a variable size of Amiga RAM memory to the Mac operating system. All sorts of combinations are provided for starting from 128K right up to your Amiga RAM total. You have the option of clearing the second 512K of memory in A2024s and 2MB A2024s in reserve. Mac compatibility with some stubborn Amiga applications. As A-Max has a built-in RAM disk, that automatically uses any Amiga memory you're not using as A-Max system memory, it's best to allow for some Amiga memory to be left over. The A-Max RAM disk is particularly useful because it's reconfigurable and will survive A-Mac system reboots, and can be booted from if it contains the necessary Mac System and Finder files.

emulator providing a very compatible Mac operating system with a very reasonable operating speed. The original Mac 800Ks and Mac system software guarantee a high degree of compatibility as long as the application software doesn't require hardware through the Mac operating system (the case with nearly all major Mac applica-

tions) and doesn't bypass it. Reflecting this high degree of compatibility there's a high entry price, but a quick glance at a Mac price list will soon convince anyone that it is not a bargain. If you can live without a Mac environment, but can survive screen deficiencies and lack of AppleLink and hard disk support, A-Max is the solution.

STOP PRESSARRIVED: QUARK XPRESS, THE PROFESSIONAL MAC PAGE MAKE-UP TOOL FOR PROFESSIONAL PUBLISHERS, NOW RUNNING ON THE AMIGA!***

STOP PRESS ARRIVED: ILLUSTRATOR 88, THE BEST GRAPHICS PACKAGE FOR THE MAC, NOW ILLUSTRATING ON YOUR AMIGA!

Yes, thanks to Ready Soft Inc's A-Max Mac Emulator you too can now obtain the most professional and versatile GTP and graphics package to exist on the Mac to run them from your Amiga 2024.

Right, you will say, where's the catch — or is there none?

All you need is an Amiga 2020 (preferably with lots of RAM) memory and an external Mac boot disk drive. The cost, well, if you assume you already have an Amiga 2020 with a total of 512K RAM (2MB fixed on an 8MB RAM extension board), then the purchase of the A-Max emulator with the 128K ROMs fixed, the external Mac 300K disk drive, Mac System disks and Quark Xpress or Adobe Illustrator 88 will set you back well over £1,100. That's £249.95 for the A-Max emulator with the 128K ROMs fixed, £230 for the original 68010 Mac external floppy disk (cheaper to go for third-party drives although you may encounter compatibility problems), and the rest for the system software and Mac application programs.

Why's all that RAM required then, if you're only going to operate with one Mac drive, you need to make the Mac RAM drive (which moderately resides outside the Mac allocated RAM area) the active system. This would be the procedure to boot and connect the Amiga into a Mac look-alike: boot up the

Amiga as normal. Start the A-Mac STARTUP program on the A-Max Program disk. You're taken to the A-Mac preferences window. Set the video and serial/parallel and ImageWriter emulation options. For the memory options select 128K and set the Mac RAM size to 128K.

This leaves you with something less than 1,000K within A-Mac allocated to the Mac RAM drive. Now set A-Max up and after a while the Mac boot screen appears. Insert the Mac system disk and your Mac boots up. Press F1 and initialise the RAM drive. Copy your System Folder from the boot-up disk to the RAM drive. Now Shutdown the system and Restart. By pressing F1 during the Mac boot screen display you make the RAM drive your active system.

Well! You now have something in excess of 700K on the RAM drive (if your original boot disk had a striped down System Folder) and can easily load Quark Xpress or Illustrator 88 onto the RAM drive. Startup the application from RAM drive and you have made free the external Mac drive ready for normal data filing duties. What's more, operating from RAM drive avoids disk loading delays and makes up for the little speed penalty incurred on the Amiga (compared to the Mac) it.

It's worth F1 if you compare Quark Xpress with Professional Page (which is totally within the

to the price differential) you may start to understand why the Mac gained its Number One position in the electronic publishing field... some's true of Adobe's Illustrator 88.

Your main problem however is that after having spent all that money you still don't have a complete Mac system — the lack of the AppleLink network environment and of any hard disk support on A-Max are heavy penalties. For one, hard-copy printing must be done by generating Postscript files (described in main article). Alternatively you can supply the Postscript file on a Mac disk to a Mac owner or Postscript bureau for laser printing or typesetting setting. A-Max does provide an Image Writer emulation program, which allows you to use a 9-pin or 24-pin Epson compatible printer on the serial or parallel port of your Amiga. Hard disk support may be provided on future upgrades. This certainly is a requirement, as anybody who's been working on a Mac knows what huge file sizes have to be transferred even for the simplest jobs.

As to the compatibility? So far no problems. The mainstream programs, which have been written within the strict

Macintosh operating system protocol all run perfectly well. Care has to be taken with programs which access hardware directly, such as Mail software, copy-protected software, games and certain types of shareware. Offer, a graphics compositing and translation program would not load, for instance.

Last, but not least, the video modes. Unless you want to walk around with constantly straining eyes and you don't have a flicker-free, good interface at all costs, A-Max does provide an option to change the two colours from the named A-Max colour to the Workbench default and if suitable default colours are selected, the straining can be minimised.

Beyond these minor differences from a real Mac, all our Mac operators agreed that using Quark Xpress or Illustrator 88 on an Amiga was immediately familiar. The Amiga key doubles instantly at the Mac Apple key, so Xpress users who know all their key commands rather than using the pull down menus, can get going straight away. A-Max keeps all those intuitive methods of working. The same's true in Illustrator 88: a vector graphics program which uses Postscript



Top: drawing of a Mac II on an Amiga in Adobe Illustrator 88 (the previous version can be seen at the top of the previous spread), and below it, one of last month's TGM review pages taken straight off a Mac-format disk but seen on the Amiga

SYSTEM, FONTS & DAS

The great strength of the Mac is its software systems control. It ensures applications compatibility, and as Apple designers improve the Systems program, users can be kept cheap upgrades which are simply installed to effectively upgrade their Mac. The System file basically runs the computer. The Finder speaks for itself, noting where files go to and from so they can be found again, opening dialogue boxes and generally acting as a disk operating system front-end.

Given that the computer's system is software-driven, it follows that you can attach other types of file to the System on a temporary basis. Fonts and typefaces — different parts of letter design (this is called *glyphs*, the headlines are in *Franklin Gothic* and most of the rest of Centre Type is set in *Gothica*, for instance). Postscript fonts provide immensely high resolution and quality, but are heavy on chip memory. If you want it to be available, the Mac environment allows you to load them (or attach them to the System). You may have 100 sitting on a hard disk somewhere (several megabytes), but by using a program called Font/DA (below), only the fonts you want to use can be attached to the System file and then appear in most applications such as Quark Xpress. Desk Accessories (DAs) are small programs which provide facilities which can be accessed from under the Apple menu, in any application while it's running. These can range from the useful (calculator or alarm clock) to the essential (status display, printer status, external disk mounting) to the utterly silly (sounding sound samples instead of beeps for alarm sounds). There are hundreds available at charge, in PD and as shareware.

Depending on what environment you want to work in, Fonts and DAs can amount to negative-plus additions to the basic System file, which is why they must be stripped out with Font/DA. Move before the System file becomes small enough to be copied across to the A-Max MTDP.

This is also where the Mac's great flexibility comes in. You can create many font-up dates for different jobs with the Fonts and DAs you need for each different job already attached to the System. Thus your Mac, or Amiga/Mac, becomes whatever type of computer you want for a specific job.

paths to describe open or enclosed areas which can then be filled with colours, or the lines given a weight and coloured (called 'stroking'), it's as simple as it sounds (but complex to get to know), and is, simply, one of the most powerful graphical packages ever developed. Graphics made in Illustrator 88 can be saved in various file formats, but most importantly as an Encapsulated Postscript File (EPSF), which provides a low resolution image for importing into page make programs, from which, when the page is printed, the real image goes as well as the text, and in full printer's process colours if that's the type of work you're doing.

We promised an article on how TGM is done using the Mac, but tell it wasn't entirely relevant at the time. How time has caught up, and in future issues of TGM, Centre Type and the TGM lab will be bring-

ing more detailed articles on the use of Quark Xpress and Illustrator 88 for Amiga owners who can now use the programs.

THE PRODUCTS

A-Max Version 1.0
Macintosh emulator for the Amiga. Ready Soft Inc., available from Entertainment Int. Ltd, 0258 581126, including Mac ROMs 8097 £104.90 inc VAT. Need with 128K Mac ROMs 8097 £249.95

Apple external 3.5" 800K disk drive, £267.50 inc VAT, available from Digital Press Services Ltd, 081 630 4288

Quark Xpress, Adobe Illustrator 88 and all other Macintosh-based products available from Digital Press Services Ltd.

INFORMATION DESK

Are computer auctions much kuf? And where can you buy Atari VCS cartridges? The Centre Bytes gurus dive into the postbag once more to answer your questions...

Making the grade

I am a potential aspirant to either the ST or Amiga. However, I am worried about compatibility problems between the power models and existing software. Steve Davies, Bristol (Hampstead).

At TCM the only compatibility problems were experienced with the older 640-512k disk drive. As it is single-sided you can retrieve easier information stored on a double-sided disk. All STs are now more fitted as standard with a double-sided drive so there shouldn't be any problems. While the Amiga hasn't given us any worries (yet).

Is there anybody out there?

I've recently bought a PC Engine and am very happy with it. Unfortunately I don't know anyone else who owns one. Do you know of any PC Engine users clubs? Stephen Penfield, Kyril.

PC Engine-owners are a small select band and should stay together. The PC Engineers are a group of PC Engine users based in London. They've just set up their own web club and each month members receive a newsletter which covers all aspects of the PC Engine. There is also a facility to swap unwanted games with other PC Engine users. PC Engineers at Golem Ave, Leicester LE5 2RS.

Going, going, gone.

Could you please tell me the addresses of any computer suppliers to the Amis or London area. Are there good places to buy Amigas, STs and PCs. Sean Bottom, Bristol. There's a computer section in the 2nd September ad.

Southgate Technical College, London N14. Generally our store are great places to buy sophisticated PCs, but not so hot for STs or Amigas. Most of the staff is in-office equipment and generally in good working order — but there are no guarantees! There are usually several models of each item. If you want to pick up a good bargain (like a cheap printer) don't do for the first few items as there always go for a higher price, save your bidding for the last few items most people have got interest.

Simulation frustration

I'm an avid simulation game fan. I'm getting bored with flight sims. They all seem a bit samey to me. Could you recommend any other types of simulation game? I own an Amstrad 1488PC. Matthew Kennedy, High Wycombe.

The PC really does seem to be the machine to go for if you're interested in simulations. There are just so many available. If you're getting bored with flight sims you could always try tank simulations (African Battle Tank from Electronic Arts) or submarine sims (808-Antak 840 from Electronic Arts and Red Storm Rising from MicroProse are both recommended). There's also the vast range of war simulations (Personal Formula One, again from Electronic Arts, and, probably better, Armadillo Duel: Test Drive II, Electronic Arts). London Business Centre, 11-18 Station Road, Langley near Slough, Berkshire SL3 8TW. Tel: (0753) 49442. MicroProse: Unit 1, Hatfield Road Industrial Estate, Tring, Herts. GU9 0JL. Tel: (0464) 54028.

Cartridge blues

I've recently bought an Amstrad Video-Game console. Unfortunately the buying problem getting hold of car-

MIDI madness

I've just started a band with a couple of friends. We're using two synthesizers (both with MIDI ports), an ST and an Amiga with Daphy MIDI Master. We were hoping to link them all up and use the Amiga as a drum machine. Could you suggest a setup? What software would we need?

John Hicks, Warrington. It's a little difficult to tell you the ideal setup since you don't say at what level what you intend to do with the synthesizers, whether you're going to sequence them, play live to a drum base or a synth keyboard or both. If you're only going to play live then you don't really need MIDI. Just lead your drum track into the Amiga, play and away you go. If you want to sequence the synth and use the Amiga for a drum machine then you will need to use MIDI. The ST is the master device and sends MIDI messages to all the other devices in the system. The diagram shows how to setup your MIDI system. Set the MIDI channel receive options as follows: Synth 1 channel 1, Synth 2 channel 2, and the Amiga channel 3. We're assuming that your system aren't multi-timed.

But if there are then there's no problem just make sure that the Amiga is receiving MIDI information on a different channel from the synth. This setup allows you to sequence all the devices and to a standard degree play at the same time. When you want to record a sequence into the sequencer software on the ST just follow the instructions on recording in the sequencer's manual and play the sequence on Synth 1. As for software you'll need to choose on the ST. There are sequencers available to suit most price ranges — watch out for a TCM sequencer special sale. While the best Amiga drum machine has got to be Bullfrog's Adrum (125.00). The program can handle up to 28 samples at can go and play back live at a time — one for each of the Amiga's sound channels. It's also MIDI-compatible. Bullfrog Productions, 3 Bridge Street, Shildon, County DU 14RT.



tidges. Do you know of any modems?

Robert Bogan, Leeds.

The Atari Games Console seems to be making a bit of a comeback but as far as the cartridges aren't widely available. However, since Space Invaders, most Atari products including VCS cartridges. Send an SAE for a full list of products and prices. Silver Shop 1-4 The Mares, Hatfield Road, Solihull, West Midlands B37 4YX. Tel: (0121) 209 1112.

Exceeded by point? Struggling with hardware working? Frustrated by account? Send all your computing questions to Information Desk, TCM, PO BOX 16, Ludlow, Shropshire SY11 1TA. We expect, due to the pressures of magazine schedules, personal correspondence may not be entered into, but the change date is handy.

Buying from Mail Order

As TCM we often receive letters from readers complaining about the service they get from mail order companies who advertise in the magazine — not many, but important to those who write them.

There are some people who complain about, but the majority are straightforward and honest. Having run mail order ourselves for many years, we're well aware that it's often software houses who let dealers down on delivery dates of newly released product. So, to avoid disappointment, before sending off that cheque in the post, ring the company up first and make sure what you want is in stock — it's easier than sorting out the problem later. If there is no phone number, don't use that company!

GUIDE TO REPAIR SERVICES

No matter how much you care for a computer, eventually something goes wrong.

And you can't let your life happen after the guarantee has expired, so you can forget about sending it back to the manufacturer. In most cases, they won't want to take.

Before packing your computer off for a repair firm, check to see if your local computer dealer can recommend a local repair shop.

Phone the company you choose and try to get a rough guide of the cost of the repair. How long it will take — and whether they'll give a warranty to do it again for free if the repair doesn't work.

Make sure that the quoted price includes parts, labour, VAT, and return postage.

When sending your computer to your local dealer, pack it carefully — preferably in the original box.

Always include a letter with your name, address, and telephone number and the effects of the fault.

Send the whole package by recorded delivery — just 24p on top of the stamp cost — and pay the extra 50p for an additional delivery slip (25p if you ask for it when you post the package). Slip if you leave it till later.

That way you know it's got there.

COMPUTERS REPAIRED: The full range of home computers — that includes all the well-known 8-bit and 16-bit machines.

PERIPHERALS REPAIRED

Centronics & Computer Services will repair some peripherals, but write or phone for details in case yours isn't included.

PRICES: According to the problem. Please for a quote.

WARRANTY: Write or phone for details. The warranty only covers the problem repaired, not the whole computer.

INFORMATION: Turnaround varies. Depending on the problem, from two days to a week.

Electronic & Computer Services also sell spare parts. Again, write or phone for details.

Woolley Electronics

37 Market Street, Reading, Wigan, Lancashire W60 3AA (0454) 500742

COMPUTERS REPAIRED: Spectrum, C64, V40, CPC.

PERIPHERALS REPAIRED: Some.

PRICES: Set price for each machine, ranging from £17 (48K Spectrum) to £25 (544K disk drive C20-M).

WARRANTY: Three months.

INFORMATION: Average turn-around time — well, quick or less the average.

HS Computer Services

Unit 3, The Orchard, Watton, Peterborough PE6 1BE (0773) 630888

COMPUTERS REPAIRED: All Spectrums.

PERIPHERALS REPAIRED: None.

PRICES: From £14.95.

WARRANTY: Three months.

Hytek Computer (Rearline)

Unit 40, Riverside Industrial Estate, Loughborough, Leics. (43435) 684

COMPUTER REPAIRED: Major systems, including Acorn.

PERIPHERALS: Most. Major sales.

PRICES: Fixed price list, available on request.

WARRANTY: Three months.

Lodhika Computing International

31 Ormskirk Road, Preston, Lancashire PR1 3QF (0773) 51474 or 0738.

COMPUTERS REPAIRED: Mainly Acorn.

PERIPHERALS REPAIRED: Printers and disk drives.

PRICES: According to machine — for example ST £34.95, XL/130/KB £23 (these prices include VAT).

WARRANTY: Phone for information.

Minotek Computer Services

218-278 Coston Exchange Building, Old Hall Street, Liverpool L3 9LA (051) 238 2308

COMPUTERS REPAIRED: AT, Amiga, BBC, Acorn only.

PERIPHERALS REPAIRED: Printers, monitors, also electronic tape drives and other office equipment.

PRICES: Start from £36 — call Mike Lopez at Minotek for a quote.

WARRANTY: Three months.

MP Electronics

Wooling, Boreham, Norfolk NR16 9LE (0493) 87337

COMPUTERS REPAIRED: Spectrum, C64, BBC S, PCs — in fact all major makes except ST and Amiga.

PERIPHERALS REPAIRED: Printers, plotters, monitors, disk drives etc.

PRICES: All-inclusive prices for most machines — 48K.

Spectrum £38, 128K Spectrum, BBC B and C64 £27.50, PCs from £20-£150. These never cover all faults except those caused by other people's faulty repairs.

WARRANTY: Phone for information.

INFORMATION: Free estimates. £20 repair and overhead service for 48K Spectrums — MP Electronics replace sockets.

Keyboard replacement etc. and will repair any fault that develop within six months of completion.

Other Major Companies: C&H (080) 0780, G&H (0440) 040, Distribution Services, Higher Operations, Manchester (0161) 770, (081) 305 2018

COMPUTERS REPAIRED: All home makes and PCs.

PERIPHERALS REPAIRED: Printers, monitors and disk drives.

PRICES: Depends on fault — phone for details.

WARRANTY: Three months.

PM Engineering: Unit 6, New Road, St. Ives, Cambridgeshire PE27 4SQ (0480) 61204.

COMPUTERS REPAIRED: All home makes and PCs.

PERIPHERALS REPAIRED: Printers, monitors and disk drives.

PRICES: Depends on fault — phone for details.

WARRANTY: Three months.

Attention ! repair firms !

If you would like a mention in the Bank Bytes repair pages, please send the relevant details to Bank Bytes, 108, PO Box 18, Ludlow, Shropshire SY9 1BB, enclosing a phone number and the manager's name (for our files).

AC Computer Services

Unit 8, Paddock Mount Office, Darwen, Taited, Manchester TN4 3PB (0952) 505717

COMPUTERS REPAIRED

Various any computer — including Spectrums, C64/128, BBC, 16-bit, C64, V40s and Plus 4.

PERIPHERALS REPAIRED: Printers, also hard disk drive service for £26.

PRICES: Mostly £23-£30, but C128 is £32.50.

WARRANTY: Three months.

ACE Repairs

Chatsworth Farm, Polney, Leam, Cornwall, PL16 2NW (0600) 30282

COMPUTERS REPAIRED: Major systems except Atari ST.

PERIPHERALS REPAIRED: Sinclair Interface 1 and Microdrive, Amstrad disk drives and printers and Commodore disk drives, printers and Modems etc.

PRICES: From £18 upwards depending on fault.

WARRANTY: Six months.

INFORMATION: Sinclair, Amstrad and Commodore spare and leads.

Ampercor Video and Computers

15A Alcester Rd, Studley, Warwick, BR9 7AJ (0427) 663304

COMPUTERS REPAIRED: All 8-bit and 16-bit machines.

PERIPHERALS: Printers, monitors, disk drives etc.

PRICES: Phone for information.

WARRANTY: Three months.

BCI (Best Computer Unit)

Galaxy Audio Visual, East

Stock, 230 Tottenham Court Road, London W1A 3AP (01) 401-8128 or 880-8840

COMPUTERS REPAIRED: All 8-bit and 16-bit including PCs.

PERIPHERALS REPAIRED: All.

PRICES: A typical small repair would cost £18-£20.

WARRANTY: Six months.

INFORMATION: Free estimates. Galaxy Audio Visual also sell spares.

Cambridge Micro Surgery

Unit 4, 57/5 Cherry Hill Road, Cambridge CB1 4BN (0223) 400234

COMPUTERS REPAIRED: Spectrum, C64, BBC, Amstrad, PCs.

PERIPHERALS REPAIRED: Printers, monitors, disk drives etc.

PRICES: Cheapest in 48K Spectrum or £18 (9) plus cost of parts, which from £23.50.

WARRANTY: Three months.

INFORMATION: Will provide annual maintenance for business centres, 20 a contract basis.

The Computer Factory: Analysis Engineering Ltd, Unit 15A, Chiswick Road Industrial Estate, Uxbridge, Middx. (0894) 510000

COMPUTERS REPAIRED: All major models except Atari.

PERIPHERALS REPAIRED: Disk drives and printers.

PRICES: £7-£40.

WARRANTY: Three months.

INFORMATION: Free estimates.

Electronic & Computer Services: 1800 Chiswick Road, Hayes, Middx. UB8 3EL (01) 873 2108

TOOLBOX ■ For the harder things in life

AMSTRAD PCW

The sheet's hit the fan

Amstrad have just launched an extensive sheet of paper (11.1896, for the Amstrad PCW512). The leader can hold up to 30 sheets at once and accepts A4-size paper of weights up to 60gsm. Also included in the package are modified versions of LotusScript and CTM.

Amstrad, Beccles Road, H8 Kings Road, Broomfield, Essex CM14 4JF. Tel: (02777) 232221.

PRINTERS

Swift stuff

No sooner than last month's printer guide had been finished but what should arrive through the post but details of the latest Citizen 24-pin printer. The Swift 24 prints at speeds of 180cps (with quality and 24-pin letter quality, comes complete with four letter quality fonts and a built-in 8K buffer (which can be expanded up to 40K, at extra cost). An optional colour card can be bought for £24 making the Swift 24 one of the cheapest 24-pin colour printers available. A resolution of 360 x 360 dots per inch makes it ideal for graphics and word processing alike.

Citizen, Wellington House, 410 Denby Road, Uxbridge, Middlesex UB8 3DW. Tel: (0894) 73521.

ATARI ST

Bundles of goodies

Computer distribution Parkfield Commercial Inc have announced a new bundle for the 1040 STFM (6495). Included with the computer is £125 of free software including Hyperplan, Hyperbase, Organiser and Print Base. You also get a £24 voucher towards three Atari packages: Borland, Backgammon and Bridge. Marver, Newcastle, below distributors, Hugh Symcox has decided to add an extra three titles to the normal ST Powerpack. The

free extras are Star Reader, Final Layers and Backgammon. However, both these companies are distributors of computers and therefore only sell to shops, with their recommended price, so ask around the independents to find the best bundle.

AMIGA

And the word is...

Essex Computers Ltd have converted their popular word processing software K-Word (£29.95) to the Amiga. Based on Longman's Pocket Roger's Thesaurus, K-Word contains over 750,000 words and phrases. The program also incorporates a phonetic spell checker — misspelled words are highlighted and the user is given a list of possible alternatives. However, to use the program your Amiga system must include either two disk drives or a hard disk. More information on the K-series can be found in last issue's Centre Bytes page (7) where we reviewed the K-Word 3 word processor for the Amiga ST.

Essex Computers Ltd, 13 Horseshoe Park, Parsonage, Salford M16 1JG. Tel: (07067) 4125.

PC

Guide to style

Proof checkers are notoriously expensive. However, Microveritas PC Systems' package runs in at only £48.95 (on either 5.25 or 3.5-inch disk). The menu-driven program examines your documents to see how it compares with other styles of writing, including general purpose, advertising copy, novels, magazine features, technical reports and children's books. Results of sentence and style analysis are shown graphically next to an identified set of errors to quickly highlight problem areas. At such a low price it's well worth investigating.

Microveritas, PC Systems (UK) Ltd, Prospect, Letchworth, Cambridgeshire SG8 5BB. Tel: (0800) 676037.

ARCHIMEDES

Rock me Armadeus

Chase Micro Systems have just launched a word sample board (12448/96) and software (£79.95) for the Archimedes. The Armadeus board offers 64 levels of software, selectable gain, stereo input and high-quality line output. The software is not only compatible with Chase's own samples but also a whole range of readily available samples including the Amadeus

448/448b/448b2, the Wotwiter APC 1200 board and the UNILAN general purpose A to D interface with sampling rates of up to 8192K. The software allows you to read Atari ST disks to convert samples to Archimedes format. Echo, fade in/out and reverse are a few of the comprehensive editing facilities available.

Chase Micro Systems, 35 Middlewich Road, Northwich, Cheshire. Tel: (0906) 45811.

ATARI ST

Going public

ST owners in search of cheap public domain software need look no further than Paradise Computers PDL. There are no membership fees and all software is available at 75p (excluding

disk) or £1.50 (including disk). For a full catalogue send an A4 SAE. Next month in Centre Bytes, we'll be taking a comprehensive look at the whole area and concept of public domain software. Don't miss it!

Paradise Computers PDL, 9 Moorfield Crescent, Bingley, East Sussex BN1 8JL.

SPECTRUM

You live and learn

Lerni Software have been releasing transfer utilities for the Spectrum since the year 80. Their latest utility for microdrive owners, the Lerni Microdrive (£11.99), formats cartridges with up to 30% more space, repairs files, graphically displays the condition of a cartridge, includes rename and copy cartridge options as well as a host of other other options to make cartridge management easier.

Microdrive owners wishing to transfer games to cartridge are well catered for. Transfer Pack 5 (£11) is capable of transferring many of today's popular games. While this information looks (£2.50) really provide details on transferring some of the more impressively protected programs. Microdrive cartridges are also available at £1.75 each (minimum order 4). And, remember, all these goodies that allow safeguarding of programs (like the Rosetta Robot's Microdrive series) may be banned as of August 1, due to new legislation.

Lerni Software, 11 Becclesfield Close, Whitby

JOYSTICKS

Blast from the past

Several joystick designers (remember the Commodore version?) have launched a new joystick, the OS-118 Winstar (£11.95). Features include two different

joys. Spectroscopic Ltd, Abingdon Industrial Park, 7 Blacklands Way, Abingdon, Oxon OX14 3JL. Tel: (0235) 564454.



Ray Tron and Wear REES
0161 2530006.

AMIGA

Engage photon drive 2

After contact wrangles with Autodesk, Photon Paint 2 is at long last set to be released to the UK, the original Photon Paint was a strong contender for best Amiga art utility. However, that title was firmly stolen by the spectacular Deluxe Paint III. Now Photon Paint 2 is set to give that a run for its money.

Unlike Electronic Arts' DPaint series, Photon Paint operates in RAM (Read And Modify) mode allowing the Amiga's entire 4096 colour palette to be displayed on screen at once. The new package includes all the old features that made Photon Paint great, such as extensive brush manipulation commands (including an impressive brush wrap and feedback tools as well as several new ones. Like Deluxe Paint II,

Photon Paint 2's main selling feature is a set of state-of-use automation commands. However, if you're Amiga isn't equipped with a few megabytes of memory you're calculations are going to be very short and simple. Look out for a full review in a future issue of TCM.

MicroSystems Unit: 4,
Cromwell Business Centre,
New Road, 15
Huntingdon, Cambs PE17 4NS.
Tel: 04803-494407.

ATARI ST

Arthur's listening

Soundex (creator of the popular Pro4 sequencer) recently released Arthur (C200) a sample editing package for 1MB STs. Some of the options include: conversion between 8 and 16-bit samples, frequency domain editing, stereo from mono samples and the ability to work on eight samples at a time as well as the usual sample with options. Examples Soundworks: The Studio, Church Street, Stevenage, Herts SG1 2PL. Tel: 0456 328844.

DISK DRIVES

Once in a lifetime

In last month's Techline we inadvertently passed the advertised price for the MOT Lifetime disk drive. It is in fact £129.95 and NOT £1999 as stated. You will also need a cable to connect the drive to your computer. They come in various shapes and sizes: Spectrum, BBC and C64 cables cost £10 each, while Amiga, PC and ST ones £18.50.

And still on the subject of Miles Gordon and disks, MOT have just released a utility disk for all Spectrum +3 owners with MOT's 3.5-inch Lifetime disk drive for any double-sided, double-density 5M byte 3.5-inch drive. The diskette allows you to format a disk to up to 788K (actual format size of the built-in 3-inch drive is 180K), get in-depth diagnostics on screen or printer (detailing areas like), and the file attributes, compare header manipulation routines (changing BASIC files to make Loaders, for example) and also a boot function which gives a the user to meet the +3 boot

within a program.

And don't forget the MOT Sam Coupe Hotline is still running. Updated weekly by the designers of the Sam Coupe, Bruce Gordon himself. The Hotline Accessphone number is (0793) 781275.

Miles Gordon Technology
Leicester, Leicestershire Way,
Suttons SA7 8B4. Tel: (0793) 781100.



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04574 69499

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Abstract

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
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Keywords: child sexual abuse; disclosure; social support

Category	Value	Unit
Accounting	10	100%
Administrative	10	100%
Business Development	10	100%
Customer Service	10	100%
Finance	10	100%
Human Resources	10	100%
Information Technology	10	100%
Legal	10	100%
Marketing	10	100%
Operations	10	100%
Product Development	10	100%
Project Management	10	100%
Quality Assurance	10	100%
Research & Development	10	100%
Sales	10	100%
Supply Chain Management	10	100%
Training	10	100%
Web Development	10	100%
Writing	10	100%

Abstract

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READERPAGE

I have watched with disgust as slowly but surely your mag has turned into another computer magazine that is geared towards the fantasies of naive schoolboys'

...writes Samantha Brydon from Nottingham. This month she gives her view on the current state of sexist games and attitudes in the computer industry, and wins herself this month's £50 worth of software



Living in a fantasy

Dear TGM

I am a female reader (yes you do actually have these!) and have watched with disgust as slowly but surely your mag has turned into another computer magazine that is geared towards the fantasies of naive schoolboys.

No, I am not a warring feminist, and yes I have a brain and even a computer. Indeed, I was upset over the remaining of *Alleges of Death's* packaging because it was a good drawing. However, I did not expect you to then go on to list other concerned readers or less about the 'offending' supplier (yet again) in *Game Over*. Clearly this is all geared to the majority of male readers.

Yes, I do realise that the majority of readers are male, yet this is hardly a surprise when one looks at the stereotyping within computer games. Of course, this is not your fault but then you go on to print as a star letter Dominic Andoh's comments on females that, complete with a picture of a woman in bra and knickers,

What this boy doesn't seem to realise is that the games he quoted — Hollywood Potter Pro, Leather Goddesses 3 — aren't sex — just really the argument that there are enough of these reviews around without you making comments such as 'and what a business she was, wasn't?'

I find your argument that *Planet Women* is exploitative ridiculous. She was the heroine, but basically it was just another viewpoint of the Doup female. Luckily for me I have a boyfriend, who after playing *Strip Poker* with her both said commented that it seemed unfair that whilst male games are geared for female readers are not. In future I will not be buying your magazine until you have anything decent or worthwhile to say.

I realise that this is not the first letter you have received to this tune, yet perhaps if you and the computer industry realised for more than the male audience then the only letters you received from girls would perhaps be more frequent and positive.

Samantha Brydon, Nottingham.

We have no regrets in printing Dominic Andoh's letter. We've never received a letter so honestly racist as his, and felt it was worth printing to see what everyone else felt. As a matter of fact we have received very little response — either because everyone is sick and tired of the whole debate, or perhaps they all agree with Dominic (which the thought).

Thoughts of Mr Andoh's letter from the TGM office rangled from 'yessss' to 'well, at least he has the courage to admit it'. Really, the computer industry is reflected to the outside world through its advertising — and like the car industry is aimed at egotistical and material males. If you stand in a computer shop for a couple of hours you soon get an idea of what a real software Super looks like — an everyday NORMAL person (and usually male) — at least the ad-

men have THAT correct). We would all welcome more women in the industry, and not just in PR (bimbo position).

There are games from female programmers recently? Not likely. In fact they seem to be too sensible for that and stick to graphics like the much loved *Drake* at Ocean. Even the magazine industry is taking time to adjust. And it's not the fault of the employees, women often seem to like being approached in certain jobs. Around 80% of freelance articles offered for TGM come from males. In fact we've only received one from a woman in the past four months: Ruth Peary, who's just started the *Calculus* (and I think is... this month featuring Marketing People (PR people)).

Looking, if you want a more balanced coverage, it's up to you to prove to the computer industry, like Samantha has, that YOU ARE out there, and want some respect.

Recycled software

Dear TGM

While listening to the radio not long ago, I happened to hear a short report on a subject which, in my opinion, has particular relevance to the software industry. It concerns the destruction of the world's rain forests. I was astonished when it was revealed that a staggering one million trees are cut down each year to produce the cassette/CD trays and record sleeves for all new albums and singles each year.

So in response to this appeal, artists are being asked to use recycled paper for their albums, which costs relatively little at today's prices.

The relevance in this is how many more trees are cut down to supply the necessary documentation for computer games? Surely the major software houses are aware of the problem, and if so, should be doing something about it. As I, and I'm sure a lot of other computer owners, are worried

about the current environmental crisis, something must be done to help prevent the unnecessary destruction of the precious rain forests. As usual, it's up to the companies themselves. With enough pressure, results may be achieved.

Jim Hurrell, Cornwall.

Well, software companies, what about it? And until they do, why don't TGM readers set an example by writing letters on recycled papers (the advice (including yourself, Mr Hurrell)).

Thanks for 8-bit

Dear TGM

Thank you for having equal 16-bit and 8-bit reviews. Most magazines are dominated by the 16-biters now. Thank you, Colin Staines, Essex.

Well, there's no doubt that 16-bit sales slightly exceed 8-bit computers. However, we haven't forgotten that there are more 8-bit computer owners out there than any other

More PC games

Dear TGM

In issue 80 I saw the 'fair-lead' competition that you did. Brilliant, huh? Who is the *Amstrad* competition did you only have the game available in anything but the PC? I would have liked to win the video recorder, but what if I only got a raised-up price? Where would that put me then.

On the second competition (win the Porsche 959!) I would have loved to win the top prize, but again I already have a copy of *The Deal*. Should I have entered it anyway and won another copy of *The Deal* (which is needed)?

On the third compo, I hear *Speed Money* is coming out for the PC, but here are no PC users around to earn a copy if we can't even enter the competition!

Please, in your wisdom say, try and review more software (games, entertainment, music, etc) for the PC and compatibles.
Gary Wain, Harington, Co.

It's very difficult to find a popular game on all formats to have a competition around. That is that *Antarctic* is only available on the ST and Amiga (see 8-bit edition), and it was possible to win an A1 power and Gernie, the book (without even having a computer). As to winning another copy of *The Deal* (see Drive II), well, it's like that for everyone!

Although the ST and Amiga are TGM's major 16-bit computers, we are always looking at the growing popularity of the PC, and cheap-

ing our coverage accordingly. Unlike the States (where the PC takes 90% of all software sales), the UK still views the PC as a business machine. Naturally because most people have only been able to afford cheap Amstrads with poor graphical capabilities and laughable sound. In the States you can pick up a decent machine for the same price as an Amstrad over here, therefore people bought them for games too.

In the UK we tend to value money much more than folk in America (big is beautiful in the States). And the



Amiga and Amstrad ST are undoubtedly good value compared to the PC. But, as you will start to become aware, TGM is beginning to cover more and more aspects of the PC. Issue 20's *Indiana Jones* *Prisoner of the Temple* showed PC screens, and the *Centronics* column was on the PC's viability for games. There's also the normal coverage of PC games, and *Madrox* regularly features PC gamebooks. This year's focus on the Amiga graphical interface is applicable to the PC as much as inevitably more than any other 16-bit machine. We've also got a few PC award features based up PC owners, keep your eyes and ears open for coverage in TGM.

tance of the game graphics, no descriptions of the games past and a half percentage mark at the end of it.

For example just look again at your review of *Howard's Stormlord* in the Amstrad CPC (TGM 81) and you will find that you printed no pictures, didn't say anything of the game plot and gave it only 66%. I happen to own the game, and the graphics and gameplay are the best I've seen on the Amstrad. In fact I was out the only person to shape this view, many other major computer magazines gave *Stormlord* a percentage over 80 and wrote large reviews on the game with plenty of screen shots.

Do you at The Games Machine headquarters actually play the 8-bit games or do you just read what's on the back cover and leave your review on that? Perhaps you should ask your magazine *The Amiga* and *ST Games Machine* as so much of your magazine is full of 16-bit games reviews, playing tips, and art and business topics. If you reviewed more 8-bit games, of which there are plenty around, perhaps you would not need to copy all those 8-bit games would buy your magazine.
Tim Ward, Leeds.

(PC: I own an Amstrad CPC 464 computer which I think is absolutely brilliant.)

Well, you seem to have a lot of facts VERY wrong. As a magazine that has since *Spectrum* and *Commodore* dedicated magazines, we use over single lot of software that's available for the MAJOR 8-bit owners. But we also review every single bit of Amstrad software that we receive. However you don't seem to understand the way the TGM review process works. The reviewer of *Stormlord* that you refer to is actually a Version Update. Version Updates only state the differences between computer formats, and their own success on that format. Above each Version Update is a list of ratings and scores for the reviewer of other formats, plus the issue of the main review (they repeat the storyline, it's the same on all formats).

David's main review was in issue 19, in which a whole page was devoted to the *Spectrux* version (because it happened) that that was the last version available for review. It's a fact that the Amstrad version is always out after the main format CPC owners suffer the

same problem). It seems that your gripe has more to do with the Amstrad version always coming out after everyone else! I suggest you buy a more popular computer if that's the problem! (Like an MSX?)

Programmers BEWARE!

Dear TGM

Software companies beware! It is Mechanical. It is Biological. It is **POKING!!**

It can cure more Goddamning, Mordant, DMA fighting, Hyperforming, Sky-Rising, Kissing, Schwedding, Fencing, Typing, Run-Gunning in Hellbusting vertical/horizontal scrolling mouse, mouse, track-ball, mouses, it's B-type your rear end!

Be careful all voracious programmers — this time I'm BEHIND YOU!! (Send me *Knights* doesn't fire plasma lasers...)

Off Cadaver, Israel.

Go away for the real thing, do you?

Best in US

Dear TGM

I have recently started reading TGM, after spotting it at a news stand alongside the usual collection of American computer magazines. As I can say it, what a difference! Not only can I read about (and order by mail) software not available in the UK, but I can now make informed decisions about software purchases. This is because *PC America* computer magazine ever publishes anything even resembling a negative review, probably for fear of losing advertising revenues. Also, the American magazines contain only a few reviews per issue, and many times the reviews are of games that have been available for months.

In issue of TGM (and the other Newfield magazines available here), I have seen advertisements for software on one page and negative reviews of the same software on another page... what a concept! Impartial, objective

No Amstrad action

Dear TGM

I am afraid that this is a letter of complaint. Why is it that you neglect 8-bit computers in your magazine? All right, I admit that 16-bits are more advanced than 8-bits, but the majority of people in Britain

own the latter. Every month I open your magazine and find page after page of reviews on 16-bit games with perhaps (with the aid of a magnifying glass) one or two tiny reviews on 8-bit games. Unfortunately these reviews have no pic-

reviewer!

Yes, the British magazines are more expensive than the American ones, but it is worth it. I no longer have to waste money on ivory software, with my purchase based on the glowing reviews written in American computer magazines. I always had the feeling that England was good for something besides Henry Pytton, *sergeant*!

Leslie D Malab, New Jersey, USA.

Leslie, I think you're going to be even happier from now on (23). TGM will be covering American activity in a DVD way, with a whole section of the magazine devoted to the subject four times a year.

Most readers will also benefit from this special section as all the things covered will eventually reach the shores of the UK. They'll also be about free gifts to go with it. Read about it first in TGM! (More information on page 84.)

Something that should also please you, as well as many other readers, is that Virgin have recently picked up the rights to produce a Henry Pytton game.

The Ed writes

On the subject of Ed Hamlin's letter (previous page) of recycled paper, I thought I would add my own comments. First I'm not against recycled paper, greenery in anything of the kind, but I think it's important that such matters don't become wrapped in emotional hype (such as BBC Radio One's preachers often did) and therefore cloud some facts.

Recycled paper is NOT cheap — at the moment — simply because there isn't much production. Also, to preserve the old job, far more research is used than in new paper manufacturing — and where do you think all that research ends up...?

The biggest area of concern is the tropical rain forests which produce hardwoods used in furniture, tea walls and many other things. Printing paper is made from very fast-growing (and reaped) light spruce woods, and almost every European magazine is printed on paper made in Finland from such trees. Let's be real, but not deaf. Any comments?

Roger Green, TGM Editor

The good ship TGM

Dear TGM
Here's again when the 'My computer is better than yours' debate was still in its infancy there was another argument that used to rattle through the computer magazines of that era (both thick jobs, full of type-in listings). That argument was based on the view that the specialist Commodore and Sinclair magazines were becoming more and more like mags in both style and appearance.

Well, here we are some five years later and it only takes a brief glance at Sinclair User or Zzap! 64 to realise that those predictions were true. Each page is full of badly drawn illustrations of stick men doing half jobs. It is impossible to read a paragraph of text without having to read some pictures covered from the magazine's editor, usually written in brackets and followed off by an exclamation mark. Unfortunately this is beginning to happen to some of the newer multi-user magazines: namely Computer and Video Games, ACE and The One.

C+VG has always been a big name so it is inevitable that The One would follow the same clumsy path. When EMAP took it upon themselves to purchase the once-excellent ACE, they not only killed it with the same mooks who already wrote for The One and C+VG but they also included their own unique technique of printing half a review and forgetting to print the rest, or

maybe printing a monochrome Spectrum screen shot next to the preview of the latest 16-bit blockbuster.

This, however, is not a letter totally full of gloom because sailing through the mists of these 'established' magazines comes the good ship TGM. When TGM was originally

but will maintain the style of writing that the potential buyer needs. Your news coverage is also well laid out and is straight and to the point. I believe that the one thing that singles you out from the rest are your excellent features. They make a really good read and you also make good use of the photographs and illustrations (I loved the article on Hercules). I hope you carry on being the main in the desert of trashy magazines and I wish you good luck on your future crusade for quality entertainment publications.

James Caldwell, Essex.



Thanks for all the praise, and very sincere comments on the computer magazine world. As most users of 16-bit machines (which TGM is slightly biased towards) are generally older than 8-bit users (so in any software shop and you'll see what we mean) so a TGM in its presentation of features and reviews. As far as we're concerned readers don't want some flowery review saying little more than the ship, with a comment about as decisive as Neil Kinnock's election manifesto. Money's worth as much to us as it is to you, so we don't make our choices for the Players/Updaters lightly — that's why we often undertake games in some people's eyes.

taunted you too were packed full of the stick men and Meeve Bush was nothing short of embarrassing (indeed, I must admit, was amusing). After a few editions however you soon pulled yourself together and became the quality entertainment magazine that this ever-changing market needs. You write your reviews with good humour

Lies, damned lies!

Dear TGM

It was with some disgust that I read, in the latest issue of The Games Machine, the aspirations and misadventures of your writer Nick Roberts on the subject of the Coconut Copiers T-shirt (Continuum, issue 21).

While it is true that this T-shirt has been a frequent and much-trusted companion over the years, and indeed has a small sweet stain as testament to its sterling service at last year's PC show, I surely reject the suggestion that I have shown it any favouritism or

more seriously, that we have any unusual relationship.

There has never been anything between myself and any of my T-shirts. I have nothing to get off my chest there.

Perhaps, Mr Roberts' article ignored, mainly not through ignorance, the enormous field within I own my T-shirtless T-shirt, without which so much of my life and work would have been so much more arduous and which, indeed, is by my side as with.

Years in favour of the right to bare skin.
Bernaby Page, Media Week

Linked, London WC2.

Perhaps one point that Roberts did overlook: Mr Page, in that, strictly speaking, my freedom occurred from a software house by an employed member of staff (which the property of the magazine and goods were sent to post) in effect are only 'loosed' to staff during their tenure). Therefore, may we please have back by return of post: a Leisure East Larry towel, and IBM puzzle toy your trips to Madrid, Frankfurt and Amsterdam, some Ocean view, an Oracle propelling pencil.

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The questions are all related to the games featured in this month's issue.

Just pick up your phone and dial **0898 555 080**

and you'll hear the questions read out, along with three possible answers. As you listen to the three possible answers tick the box on the entry form below which you think corresponds to the right answer — A, B or C.

When you've answered all **TEN** questions, complete the form with your name, address and phone number and send it to: **GAMES MASTER JACKPOT GAME, THE GAMES MACHINE, PO Box 10, Ludlow, Shropshire SY8 1DB**. We'll put all the entries in a sack and the first entry pulled out at 9.30am on September 20 wins £1,000! It could be you!!

TGM's Games Master Jackpot Game is produced in conjunction with Outboard Ltd. Calls cost 54p per min. ex. tax, 54p all other times. If you don't like the phone bill — please ask the person who does before making this call — say! Standard competition rules apply.

Information and tips!

Printed here are the numbers which connect you directly to the TGM hotline services. We've got 100 lines, open 24 hours a day, so don't worry about the service being engaged.

Grab the latest news on what's happening on the TGM scene. Update line **0898 555 085**.

Games players are also well catered for... Robin Candy is working overtime and getting all the hottest tips on the latest games. Read help, try the TGM Tips hotline **0898 555 087**

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8-BIT

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NOTE The BBC has appeared in many models: BBC A, BBC B, BBC B+, BBC Master Series and

BBC Master Compact. Only the last two are currently listed below are the specifications for the BBC Master Compact.

Despite its name, the BBC range has always been produced by Acorn (who now do

the ARMSTRAD), but when the British Government decided to put computers in schools, they called on Acorn's Bank to provide a specification for manufacturers to work to — and Acorn got the contract. **PRICE** Master 120 £450 (50



Master Compact C8000 on its own, £419.45 with TV module, £468.95 with video module, £528.75 with colour monitor. **ARBITRARY UNIT**

PROCESSOR 8-bit 68C12 **RESOLUTION** (several) modes, ranging from 160x200 (16 colours) to 640x384 (black and white). **POWER** four-channel six-colour output through internal speaker. However, with an add-on BBC interface the BBC series has become popular with a number of professional musicians, thanks to its Busbar and Busbar+ have been known to use the BBC to as a MIDI controller.

VIDEO Composite Video, RGB, optional TV module also available. **SOFTWARE FORMAT** Converts and disk. **PORTS** 16-way expansion port, synchronous serial, asynchronous parallel, RS232C standard disk drive interface. **SOFTWARE** There's a vast range of educational software and applications, because until recently the BBC was the most common computer in British schools (it's now being overtaken by PC-compatibles and, occasionally, ATs and Amigas). A few games will appear.

AMSTRAD CPC

PRICE The CPC644 (built-in tape deck) is £199 with green-screen monitor or £299 with colour monitor. CPC644 models are no longer produced. The CPC6128 (also built-in external disk drive) is £299 with green-screen monitor or £399 with colour monitor.

AMSTRAD CPC644/CPC644 64K, 128K/128K **PROCESSOR** 8-bit Zilog Z80, 4 MHz.

RESOLUTION 160x200 (up to 24 colours) or 640x200 (16 colours) or 640x320 (4 colours) or 640x480 (2 colours).

COLOUR PALETTE 27 colours and shades.

SOUND three-channel eight-colour through built-in speaker, but stereo output is available. Sound quality is reminiscent of early arcade machines. No MIDI ports.

VIDEO Monitor supplied with all models. RGB sync output. **SOFTWARE FORMAT** Type or 3-inch disk. Disk drives format to TRS-D on each side.

PORTS CPC644 has Centronics

KEY

■ **PRICE** (usually the recommended retail price), including VAT. Computers are being sold with 'bundles' (software, manuals and books) and more often, and prices change frequently. However, particularly high-cost add-ons (such as colour monitors, or they amount add much RAM for advanced options).

■ **MEMORY** Don't be fooled by terms or publicity which claim an apparently cheap machine running fantastically sophisticated software. Many computers — the XT, for instance — use 16-bit processors with different internal chips, and because of chip price, memory is extremely expensive. This is particularly important in packages using digitised graphics as sampled music.

Memory is measured in bytes (1 byte = number of bits machine is, say 16-bit), kilobytes (1K = 1024 bytes), or megabytes (1MB = 1,048,576 bytes).

A few exceptional models have hard disks — usually 5MB, 10MB built into the computer. They're useful for storing frequently-used applications software, because you can load from them much quicker than from a disk or tape drive (external drive). But for games, they're really a waste of money.

■ **PROCESSOR** The important aspects of a processor are at what length, and at speed. A long word and high speed means compact graphics can move very quickly (and multi-tasking in applications like databases is speeded up). Word length is usually 8, 16 or 32 bits — a 16-bit machine can process twice as much information at once as an

8-bit machine. Speed is usually measured in megahertz (MHz), which means 'million things done each second'.

Most personal computers have one processor to make the software do its work, sometimes the Amiga, who have 'dedicated' processors to handle graphics and sound, while two the main processor to do other things (that is called multi-tasking).

■ **RESOLUTION** is the number of pixels on the screen. High resolutions mean more detailed, realistic graphics. Resolution is measured with two numbers: X number of pixel columns across the screen, Y number of pixel rows down the screen. However, high resolutions can generally use lower colours together on the same screen, because they take more memory. Unlike the heading we've noted how many colours are available (screen at one time).

■ **COLOUR PALETTE** the total number of colours available on the computer (though not at the same time).

■ **SOUND** The important factors here are channels (the number of different pitches that can be played at a time) and pitch range (measured in octaves — 80 octaves is the distance from, say, the C in the next on the piano).

■ **VIDEO** Most games computers can be connected to the TV or to a monitor, via a lead which plugs into a port.

Today most monitor output is the high-quality RGB standard (the three other methods, such as BBC and MSX, use a single composite video output, which doesn't show such high contrast).

■ **SOFTWARE FORMAT** Software comes on tape, disk, ROM cartridge, ROM card, or CD ROM. Generally this isn't a factor in purchasing — if the machine is important enough, people will purchase software for it. However, there are a few exceptions.

Tapes are notoriously slow to load (and less reliable than disks). Amstrad's 3-inch disks are used only on their CPC, PCW and Spectrum 3 models, which means graphics, words are stored on them cannot be used in another machine without an emulation software and hardware.

And if you buy a PC-compatible, try to get the one with a 3.5-inch disk drive — 5.25-inch disks are fast becoming unpopular, and the software supply in that format may dry up.

Also, if you're doing more than playing games, make sure the machine can format hard-disk memory disks (all hard disks must be formatted before use). It could be frustrating to write a 5MB manuscript if all you've got is an Amiga 500 STFM — yes, the memory handles it, but data formatted by this model can only take 10MB of data.

Most disks usually cost around £1.

■ **PORTS** ARCADE, printer, modem, mouse, MIDI music equipment, extra disk drives etc all plug into special ports. Make sure the model you choose has all the ports you need — and where extensions are concerned, never take 'probably' for an answer.

■ **SOFTWARE** It's obvious that... this 'probably' list, always new machine is released, unless there are some games to run on it.

installed. 8-pin DIN RGB with sync luminance, 3.5mm stereo socket, joystick, PCB expansion port for disk drive and RS-232C serial interface.

CPC644/6128 have Commodore parallel, 8-pin DIN RGB with sync luminance, 3.5mm stereo socket, joystick, cassette port, PCB expansion port and second disk drive port.

SOFTWARE Most Spectrum and C64 games are converted to the CPC but they tend to run slightly slower. The CPC6128 is capable of running CP/M so a good selection of business packages are available.

COMMODORE C64/C128

PRICE C64 is £129.99 including dedicated Commodore cassette deck and some free software. C128 including disk drive £199.99.

MEMORY C64 64K, C128/C128D 128K.

PROCESSOR C64 8-bit 6502 2 MHz, C128/C128D 8-bit 6502 plus 8-bit Zilog Z80 4 MHz.

RESOLUTION C64 320x200 eight colour colours, but attribute system limits the number of colours that can be placed adjacent to each other. C128/C128D in 128K mode has a resolution of 640x200.

COLOR PALETTE 16 colours and shades.

SOUND Three-channel eight-bit sound chip which outputs through the monitor/TV. The 6581 DSD chip found in these Commodore is one of the most sophisticated sound chips on a 8-bit computer.

VIDEO TV ports on all models. C64 has a composite video port, C128/C128D both have RGB ports for an 80-colour display.

SOFTWARE FORMAT Tape at 5.25-inch disk (C128D only). Commodore also manufacture two external 5.25-inch drives — the C1541 (formats to 140K) and the C1571 (formats to 280K). Blank disks very cheap, but rarely damaged.

PORTS RGB (C128/C128D), composite video (C64), two joystick ports, cassette, TV, expansion ports, serial (optional), see port.

SOFTWARE The Commodore 64 is an old computer with years' worth of games and utilities, many imported from

America. Many users, as new software tends to flow for some time yet, Z80 chip on C128/C128D allows it to run software written for CP/M operating systems.

MEX-II

NOTE MEX and MEX-80, MEX-II and MEX-80+ are not brand names of actual machines — MEX is a compatibility standard, or a set of rules for designing computers, developed by Japanese inventor Ken Matsui in the early 1980s.

The situation is a bit like that of PC-compatibles: many manufacturers have produced MEX machines, but basically the same software must run them all. The most famous MEX manufacturers are Sony.

PRICE Prices start from about £340 and rise according to model. The MEX-10+ (see TOMMIE) seems to sell and officially available in Britain.

MEMORY Models range from 64K to 256K.

PROCESSOR 8-bit Zilog Z80A, 3.57 MHz.

RESOLUTION Various models: 512x112, 256x112, 512x224 (standard).

COLOR PALETTE 256 colours and shades. The MEX-80+ has 18,288 colours.

SOUND Stereo-channel eight-bit sound chip which outputs through monitor/TV.

VIDEO TV port and SCART plug for RGB monitors.

SOFTWARE FORMAT Tape, ROM cartridge or 5.25-inch disk.

PORTS Varies according to model but most include TV, Commodore parallel, two joystick ports, MEX expansion port, Z80 plug to connect to cassette recorder, and cartridge port.

SOFTWARE Plenty of games and applications are available, but don't expect to find much in the high street. The most well-known MEX supporters in Britain are Komax, who run a users' software club — (0203) 54795.

MEX software is generally compatible — that is software written for the MEX will run on the MEX 8 and the MEX-80+ (but not vice versa).

The MEX machines have the same BASIC programming language (called MEX BASIC) and the same Microsoft operating system (MEX DOS).

SINCLAIR ZX SPECTRUM

NOTE The Spectrum, now manufactured by Amstrad, has appeared in many models: 128, 48K, 48K+, 128K+, +2, +3 and +2A. Only the last three are now available new.

PRICE +2/+3A, with built-in tape deck starts £129. +3 with built-in external disk drive, light

large recorder and a TV port, 128K+ has expansion port, TV port, Vico phone connector for M10100-210 serial, two 1.5mm jack sockets, RGB port, Vico phone connector for add-on keypad.

+2 has expansion port, TV port, RGB port and Vico phone connectors on 128K+; also two non-standard joystick ports and a 1.5mm socket for outboard



gun, joystick and the games T199. Other models available very cheap secondhand.

MEMORY Mostly drives have names +2/+2A and +3 have 128K.

PROCESSOR 8-bit Zilog Z80, 4 MHz.

RESOLUTION 256x128 (eight colours maximum, but only two colours can be used in any given 8x8 pixel block). This also means colour clash in games that use a lot of colours.

COLOR PALETTE 8 colours, can be increased to 16.

SOUND 128K+, +2, +2A and +3 have three-channel output via monitor or TV (16K/48K/128K) have one-channel output via built-in speaker. +3 has built-in non-standard MIDI port.

VIDEO All have TV port. 128K+, +3 and +3A have RGB ports.

SOFTWARE FORMAT Mostly tape. Early models had from ordinary cassette player (tapes cost). +2 has built-in tape deck. +3 takes 3-inch disks, though many people prefer to use tape because of disk-loading problems; one built-in reversible auto-loaded external disk drive can format disks to 700K each side.

PORTS 16K/48K/128K: expansion port, two 1.5mm jack sockets for outboard the Spectrum is a

word.

+3 is an 128K+ and also has Commodore parallel printer port and port for second disk drive. Early +3s have two 1.5mm audio input jack sockets, later models have one which performs the same function. Also MIDI port on the later models.

The recently-released +3A is technically virtually identical to the +3, apart from the fact that it has no disk drive. On the outside, it looks like a +3 except that it's black, rather than grey. However, it has several serious incompatibility problems and will not work with many +3 add-ons.

SOFTWARE The Spectrum is the biggest-selling home computer in the UK and (at all informed guess) at least 3,500 games are available. With the growth of 16-bit this year, most of the great classics were Spectrum titles — many still are. A wide range of utilities is also available, but the machine is inadequate for graphics work. Slow/inadequate loading and small memory cause problems with big data processing (eg accounting word processing).

SINCE MARCH 22: 48K AND 16-BIT COMPUTERS AND CONSOLES



■ UNCLE MEL'S TRIVIA QUIZ ■

- 1) True or false: Adventure's Cosmic Demo is the biggest ever computer game?
- 2) What has Mick Flanagan designed for the New Stays Update?
- 3) True or false, the turn-of-image scanner interfaces with the Late Lanya voice chip and the Berthold breath word processor?
- 4) Where did the title of the sci-fi film Zardoz come from?
- 5) What is a CLUTT?
- 6) What do you call a magazine that rips off Uncle Mel's Trivia Quiz and uses questions already published in TOM?
- 7) The on-board computer used during the first Apollo moon landing was as sophisticated as: a) Schneider Portable AT, b) Pagan Organiser, c) IBM PS/2.
- 8) What software titles have been mixed into these toilet habits?
- 9) BOTTLE PURRS, LO DEAD BOG RUN, PAW SPOT MAT.
- 10) In what year was the soon to be re-launched Golden Vision machine originally marketed in the UK?
- 11) Where does Wally Weisus come from?
- 12) What is unusual about the ROM data in the new hand-held from Ponder Computer?
- 13) Which country topped the 1988 league table for the number of home runs per head of population?
- 14) What do floppy disk manufacturers Parrot and a many-sided geometric figure have in common?
- 15) Which game packaging contains a surgeon's glove and mask?
- 16) In Return of the Jedi, who lives on the following planets: Tatooine, Dagobah, Endor?
- 17) What have Konix and the Boston Stranger got in common?
- 18) Who created Balman?
- 19) Why has the National Association of Computer Resellers changed its name?
- 20) What have Softak and the editor of TOM got in common?
- 21) What's the difference between the SAM Coupe and the Loch Ness Monster?

Answers

- 1) True. It's the biggest ever computer game.
- 2) What has Mick Flanagan designed for the New Stays Update?
- 3) True or false, the turn-of-image scanner interfaces with the Late Lanya voice chip and the Berthold breath word processor?
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COMPETITION RESULTS

ASTAROTH

Reveron Issue 20
Tom Gibbons, from Taunton, receives an Amstrad Video Recorder, a copy of Gamma or video, the game and a poster.

The ten runners-up, who each receive the book, a poster and a copy of Astaroth (or another 5-68 Reveron game) are:
Mike Faraday, Aldershot
0223 8840; Alex Harrison, Bournemouth L43 2JY;
Gavin Garbutt, Leeds LS8
6DS; Brett Patterson, Sheffield S2 5SB; Paul Hobbs, Southampton SO1 6RF; P Rushton, Market Drayton TF9 2BX.

DUEL DRIVING

Accolade Issue 20

The winner of a fabulous remote control Porsche is Steve Taylor from Norfolk. Congratulations, Steve!

GAMES MASTER JACKPOT
The Games Machine/Motive Issue 20
The ever-so-lucky (and clever) winner of this month's £1000 cash prize is Brian Lee, from all the way up there in Aberdeen.



JOYSTICKS

On Gale Marketing Issue 20
The two winners of a Quickjoy Superstore joystick (complete with stop watch) are, H C Cheung, from the seaside town of Ramsgate, and David Coveney from Redcar.

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North West

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EARLY WARNING:

If you wish your order to commence with issue 25, we must receive your coupon no later than 31st August 1989. Please allow 28 days for your free gift.

See notes on page 10 for details.

An Industry Idiot's Guide to the Software Industry

BY RUTH PRACY

Part 2: The Marketing Peoplettes

Marketing peoplettes sell Other People's products. They don't really care what the product is — airplanes today, earthworms tomorrow — so long as there's a market for it. If there isn't a market for it, they'll create one. That's their job. A Marketing Peoplette can sell anything to anyone, any time.

In the Old Days, of course, MP's didn't exist. Marketing somehow muddled along without them, acquiring things he really needed and could use.

No one can say when the MP's appeared among us; their first tentative approaches to humankind were subtle in the extreme and carefully orchestrated by MP infiltration (Observations and Espionage [O&E]) backed up by MP Research & Development.

Marketing Peoplettes, you see, are not quite like the rest of us. In fact, they are entirely **UNLIKE** the rest of us. They come from a shadowy dimension that interfaces with ours somewhere along the borders of Reality. Marketing Peoplettes are innately envious of Reality. They would like to be Real too.

As MP's can be Real only so long as Real People believe they are Real, the discovery of Marketing gave them the chance they had been waiting for — Marketing being a business that demands its personnel to be as flamboyantly Real (they call it "high profile") as possible. Even once the games software industry was the answer to a phantom's prayer, and they relied on it with almost-religious faith and hope, schoolgirlish cries of

glue (as designed by MP R&D, with that degree of shade going on around them, so-o-o, but **glue**, in case you go to notice that there are those among us who aren't, well, **glue**, mostly **glue**).

Because they don't actually exist in our dimension, their bodies when manifested in Reality are rather like smoke: one puff of wind and they blow away. MP R&D have put in a lot of time and effort to prevent this happening.

Totally dedicated to their work (after all, without it they would vanish), MP's appear mostly as females. R&D having discovered (through exhaustive analysis of the human (jet-)minds) that customers react best to females — it is believed that there is some correlation between this and the fact that most MP's customers are male. They are all blonde, not, as you might think, because Gentlemen Prefer Blondes, but because peroxide is the most efficient way of keeping their synthetic, which has an alarming habit of falling out in their customers' fingers, firmly anchored to their heads.

Brightly-colored tracks are the order of the day — they attract attention, and the more attention an MP gets, the more Real she becomes. These

tracks are worn **TKUFT** — actually to stop the MP's feet from floating off into the stratosphere every time the wind rises above Force One, but giving the added advantage of producing very positive psychic responses in male customers.

The MP's pour themselves into these tracks and their vacuum-seal them by a remarkable process which most human women (and men) would give their eyesight to discover. As lights are delicately **CUFT**, less protected MP's cover all exposed limbs with a dark brown varnish, courtesy

of R&D. Those who are really skilled at holding their shape wear stockings, a feat beyond most MP's (and many humans) because the suspender belt cuts through them like cheese. Their faces are held in place by liberal applications of make-up, applied with a plastering trowel and removable only by powerful **CUFT**. A few enterprising MP's, trying for the "natural" look, use R&D's varnish instead, not generally a good idea, since it tends to emphasize the **Realness** of their **syntheticity**, which is forever peeling off.

MARKETING PEOPLETYPE TYPE #1: The Executive

Distinguishing Marks

There is really only one sure way of telling one MP from another — their cars. Cars are the status symbol among MP's, and give a clear indication of their placing in the MP hierarchy. The Executive MP drives a Granada 2-litre GL. It should be said with her company for some time and has **Proved Her Worth**, she will have a car prize. If she **Proved Her Worth** And Then Some, she will have a car tax. Very occasionally, she will have the Managing Director as well (this is known as **Insurance**).

Habitat

The EMP has a nice little house somewhere in the suburbs, which she shares with two cats (special agents for MP infiltration), a budgie, and an

endless string of human males whose **Reality** noticeably decreases as her's increases. The smaller footmen is devoted exclusively to clothes which she will cheerfully lend to less fortunate colleagues; plain, glasses, socks; and the box room holds 67 pairs of shoes and three large shelves full of make-up and varnish (labeled **Mark-Ten**).

At her office, she has a Very Nice Desk with an extremely comfortable travel chair where she sits to do her nails. Her phone rings constantly and her human colleagues have been known to comment on the remarkable, almost magical, way her paperwork (of which there is vast quantities) gets done (not as magical as it seems — R&D send in the Special Support Squad every night to do it for her).

Behavioural Patterns

EMPs spend a lot of time at parties (often called Trade Shows), where they meet lots and lots of people and make lots and lots of friends, all of whom believe in them implicitly and do whatever they're Ready.

As for the senior standing, the EMP has been given the best possible equipment by MP&RD. One can choose her personality from a wide selection, ranging from Coolly Efficient through Buddily to Delightfully Flustered. She has been provided with an impressive string of qualifications from Real Human educational establishments, some of which she has actually attended, and has even been granted enough intelligence to be able to take an interest in computer games. EMP's wife has Proved Their Worth And Then Some will even be able to PLAY the games they promote, and in truly exceptional cases have been known TO PLUG THE JACKPLUG INTO THE RIGHT PORT. It is even rumored, though this may be taboos, that one EMP has mastered the concept of matter lines.

A typical EMP phone conversation will run like this:

To a Distributor: "Hello, Mr. Sweetie. Cherub. I've got a Wonderful New Game for you. You'll love it. No, it isn't finished — but it's going to be released next week. Darling, I'd love to show it to you, but you know how it is... yes, it's got a bug. Ha, no, just a teeny one, a little hiccup with the paper controls... a five minute job, that's all. Naughty, that's what you said at the party. Mmmmm... THAT party. Gentle Angel, about that little trouble you own me... five thousand units of each for next! Darling, that's wonderful. We must get together again sometime. Bye-bye."

To the Press: "Oh, go on... give us a gold star. We haven't had one all year. Go on... I know you haven't seen the game, but it doesn't matter, really, it's wonderful. Yes, I promise you it is. Go on, give us a gold star. I'll be incredible grateful. It really is a fabulous game. Yes, of course it is, really. No, the music isn't in yet, but it's going to be marvellous... yes, really. Oh, that's just what you said at the party. Mmmmm... THAT party. Yes, it was, wasn't it? You will? Oh, that's fantastic. And lots for the music? You're wonderful. We must do it again sometime! Bye-bye."

get very bubbly-bubbly with senior executives and anybody of any importance whatsoever. They spend a lot of time working on their cover stories which must be as airtight as possible to get attention. WMPs are therefore always divorced, or getting divorced, or having a simply terrible time with their boyfriend. They spend terribly long periods of time telling all those stories to anyone who has the strength to listen. They have the strength for everybody and develop enchanting little catch-phrases (such as "Watch Me", "Bello" and "Gosh, Mmm") to use on the phone so that they can be identified among the common herd. Even so, WMPs have a disconcerting habit of flicking out of existence at crucial moments never to return, just because everybody has momentarily forgotten who they are. Sadly, it usually takes several weeks for anyone to notice that they're gone, if they ever do.

These huge efforts of concentration leave very little over for the software side of things. Most WMPs are convinced that all computer games are "taped" (as anyone who has ever had to

correct their playing instructions or copyright notices will confirm). Once are something they have in their backs which they take to a Very Nice Young Man called an Omeo-something-or-other to get massaged, after which they go to clinics with him.

Before they show a game to anyone they play it for at least five minutes so that they can tell him all about it, and they show up handy little press releases which tell all the wonderful key facts of their wonderful product (usually dragged out of a hapless programmer at midnight). The more competent ones will be sent out to demonstrate the games. A nightmare for all concerned, since as far as EMPs are concerned, losing is something that happens to losers outside the warehouse where they've sold the product, or, even better, what they get in the bar after work.

Other Remarks

If you want to hit a EMP where a really hurts, just mention the Kink Team. She probably lost 70% of her sales to them last year.

MARKETING PEOPLETTETTE TYPE #2: The WYSIWYG

Distinguishing Marks

If the WMP has Proved Her Worth, she drives a Sierra Sapphire. If she hasn't, she gets a Fiesta. Very occasionally, she will have to share a (good car, or, does without one altogether (this is called "telephone sales").

Habitat

The WMP is very, very common throughout the games software industry. Any given company will have at least five times more WMPs than they actually need, and nobody will be able to tell you why or when they were taken on. These people may have a function at one time, but no-one can quite remember what it is anymore. After all, they've probably been with the company for at least six months, and now they're there, you're stuck with them.

They fit around the office looking terribly nervous or terribly bubbly depending which personality R&D have created them. Having no clearly defined job, they tend to move around from desk to desk incessantly, doing whatever comes to hand — whether it be mowing telep-

tion or talking to customers or the press. Some say this is because they're mis-educated. Come on it's because they don't know what desk is actually theirs.

All this makes because MP&RD's resources are limited, and so they only equip the WMPs with the minimum needed to establish them in Reality. Hence they don't get, having to make do with elaborate cover stories and a decommissioned gas tank which they share with up to 3000 other EMPs and where they go to swap WMP-type stories and that around out of their skulls (and the rest of your head) to get away from it all.

Behavioural Patterns

WMPs deal with the tatty-gritty of marketing games software. This explains an awful lot about the industry as a whole.

Desperate to be as Real as possible on the limited resources provided them by MP&RD, WMPs spend most of their time pulling themselves rather than selling their product to increase their Ready quotient.

They go to a lot of parties and

MARKETING PEOPLETTETTE TYPE #3: The Male

Distinguishing Marks

A rare fish, this, readily identifiable because he wears trousers and NO MAKE-UP WHATSOEVER.

He does, of course, use various (jiffy disk) on all areas not covered by his carefully casual suit. Because it's harder to be a Male MP than a female, he carries a Pocket Organizer to remind him who he is. He has very, very white syntheses that look very, very good against his very very dark syntheses, and does.

He drives a classic new BMW and ALFA Romeo has a car phone. He usually has personalized number plates, too.

Habitat

The MWP has an OFFICE. It is always, but always, the biggest, comfiest, gaudiest and BEST in the entire company. The MD's office cannot compare; the MWP's has deeper pile carpets, bigger filing cabinets, comfier chairs with more hydraulics than an oil well, and his own coffee machine (called "my secretary"). The team at his desk (read "back wood, not MP") must-and is usually decorated with a hat

ful of telephones in glorious technicolor, only one of which is actually connected to anything. He is a Master of Reality and has a Very High Profile. He can often convince people that:

1. He is what he says he is.
2. Can do his job.
3. Is worth every penny the company talks out for his salary.

He's also a secret letter.

Behavioural Patterns

The MWP has an Attitude Problem. It works like this...

Totally dedicated to selling himself... and his product, and having been pleased with results by R&D, he has to prove he can sell more, better and faster than all those darn females out there. The best way to do this is to have the Best Product in The World, or at least to convince everyone that he has it. Being such a sweet talker he also convinces himself that he has the Best Product in The World. It's a logical conclusion, then, that anyone who doesn't want to buy it is totally out of their tree and not worth bothering about. His less-than-tactful expression of this point of view to his customers has frequently led to his being requested, or

even assisted, to leave the premises by the back customers.

His survival instincts, however, are well-developed. He knows he's got to keep the women down, because if he doesn't he's going to be out of a job and out of Reality PDC — nobody is more aware than he that the little darlings are just waiting for a chance to get their little knives in his back, then nails in his eyes and their back-saws on his chair — permanently. So he buttons them up like crabs and makes sure that each one of them knows that such is absolutely the only girl in his life. The instant any of them goes halfway towards promotion and quarrel may towards his job, he states the memorable phrase: "Baby you're unwell, whereupon she vanishes

through the dimensional interface if a puff of repointed Multi-Ten.

Other Remarks

The MMP is paranoid about his quality material. Only HLL can give it out. Besides, he figures, only HLL should receive the gratitude of the customers for such largesse. So he seals the tops of all his boxes of T-shirts, posters and freedom Lingerie bars with seals and yards of parot tape, signed in triplicate and post-locked. The latest snarl among MMPs and WMPs is seeing who can get the most goodies out of the bottom of these boxes, and then betting on how long the MMP will spend on his Peace Organizer trying to work out if he miscounted.

MARKETING PEOPLETYPE TYPE #4: The Human

Distinguishing Marks

Male or female, the odd one of these does stay into the business from time to time, possibly by mistake or because they're related to the MD and he wants them out of the date queue.

MALE — Wears a floppy cam-pump T-shirt, stenciled sweat, faded sweaters, trousers and a bewildered expression. He is frequently mistaken for a programmer, which is what he'd really like to have been, if only he could have worked out the difference between Return and Enter.

FEMALE — She's not blonde, not slim, and couldn't have fitted into an MP-type truck at five years old, let alone 15. This is not saying that she doesn't try, if everybody else around the place is wearing them, she'll try, she ought to, as well. The result of this philosophy can be interesting, if somewhat less than desirable.

Both male and female MMPs drive slappet-out Fivers with the left wing bashed in.

Habitat

MMPs have HOMES. Unlike everyone else in the games software industry, they actually go to them. In fact, they spend more time at home than at work — or at least, more time somewhere than at work. MMPs, you see, have Private Lives, and when they're not living them somewhere, they're sleeping off the after-effects. When they do show up at the office they can generally be found on a shelf in the warehouse, snoring happily

Behavioural Patterns

MMPs shift an awful lot of stock. This is largely because they go to an awful lot of the Rights lot of Parties, meet an awful lot of Fun People and generally have a Good Time. They don't give a hoot about their product so long as they get their wage packet on time and are about as dedicated as an Arniego. Customers buy from them out of sheer relief — they know a Real Person when they meet one.

The major part of MP R&D's resources are now committed to finding out how MMPs do it so they can do it too. They are already educating all MPs in the art of dancing on tables at large parties, since the roaring success of certain MMPs who used this ploy at the Industry Dinner and other related functions. R&D have further concluded that dancing on tables is even more effective if accompanied by the removal of certain articles of clothing and the consumption of large quantities of alcohol, not necessarily in that order. All MPs are being instructed to practise this technique whenever possible.

Other Remarks

And this in Din tables take the strain?

The characters in this article are based on no particular person or persons. No harm is intended.

**MORE IN THIS
OCCASIONAL SERIES
SOON...**

PBM U



After last month's introduction to the world of PBM, John R. Woods looks at a battery of fascinating releases and starts with a peek at two new games from Standard...

Standard Games are one of the fastest growing companies at the moment. They combine high quality product with a handy service. Mutant Wars is among the batch of their most recent releases. The game is a computer-modulated wargame, designed to give fast action and excitement. Each game has 26 mutated players starting it out over a map of 30x30 squares. Mutant Wars is set in a post-nuclear war era, with the radiation having caused horrific effects. Now, a few generations later, these mutations are so varied as to have not just different appearances

suppose that Frankenstein and Dracula existed — that Lovcraft's horrors really stalked the Earth... Just suppose that they still do... When strange things occur and the police are baffled, the FBI steps in. Leads may include newspaper reports, or stolen files, with which you must track your way to solve the mystery. This is a very original looking game that looks like good solid fun, and with start-up at £3 (includes two turns), and further loss at £1.75 it's reasonable price.

Legacy of the Panther is the first game from the West. Panther Games, and players, install nations have been... Available. It's a wargame set in the Empire of the Panther. A fantasy world, with a... struggle to become... Emperor. You are one of the hundred or so remaining Area Commanders of the old empire. Starting with a small force and limited resources you must impose your will over the surrounding areas by invasion or other means. Whether you are a tyrant or benefactor is up to you. You may choose to further the aims of the old empire, or attempt to go it alone outside its borders. Each turn you get to roll out up to 25 orders. For just £1 a turn, all TGM readers can get their first turn and start-up absolutely free!

Taking place in a pre-mid. Pseudophysics, from Chaps, is an adventure game for up-to-40 players. Each challenge is set in a different scenario, with players competing to ascend the levels before they dissolve from beneath them! There are scrolls to read, chests to open, weapons to seize and strange entities to puzzle over. The game changes as it continues.



As a special deal for TGM readers you can get the colour boxed start-up absolutely free! Further turns cost £2 (or £3 in the later stages).

Also from Standard Games is Adventure Kings, an epic game of adventure and imperial conquest. You play an elf, dwarf, or a human, and must wield your armies to become the ultimate ruler over 11 other players. Magic, hidden lairs, monsters, unique exploits for every game and 15 army types, make this a very exciting fantasy wargame. Adventure Kings is more sophisticated at £5 for your start-up (which includes your first two turns) and £3 for further turns. Computer owners can also send in disks or play by electronic mail.

Ghostsuckers

A new hand-modulated game has been launched by Temple Games. In Gorkick you play an investigator for the Institute of Paranormal Research. Just

UPDATE

so don't forget to explore and map each level. Start-up costs £3.50 (includes three turns). Subsequent turns are 50p (£2.00) each, according to the number of actions in the open-ended game, with a first £1.20 charge in the 4-6-8-10-12 game. The outlook can also be purchased at £1. Overall the game looks fairly simple, and may lack lasting appeal, although it's a good introduction game.



How to PBM

Card and Ken Mulholland, of Time Patterns, have come up with a PBM first. Their book is entitled *Games: Matchship* — How to Design and Run a PBM Game. The book stretches to 106 pages and contains numerous quotes from the professionals. The book covers definitions of types of games, the game design, how to organise your firm in terms of time, costing, equipment, staff etc., marketing your game, and relating to the players. Overall the book is a real credit to the authors, being both comprehensive and well written. If you're thinking of taking the plunge into GMB then this will be an invaluable guide at only £3.50.

B&P Games have been around in PBM for a couple of years now with their popular roleplaying game *Raiders of Gladiolus*. Mike Richards, their boss, has taken the plunge and employed his first Games Master to run a new world using the same system. Indeed, it's a strange world with Dragon Riders, winged dragons, lizard men and humans, all competing to dominate. Play one of these forms, develop your character and exploit its strengths. Turns are lengthy at about two typed pages, which more than justify the turn fee of £2, and a rulebook for £5.

At this point I thought I'd be a good idea to give players some hints on roleplaying in PBM games. I remember the first time I read out one of these games, and to be honest I read out loud.

In most roleplaying PBM games you take on the role of a

character in some sort of fantasy land. Each turn you must detail the actions of your character, and the GM will decide how the actions went and give you a storyline to follow and use next turn. The object of roleplaying isn't as clear as in a board game. You're not necessarily aiming to become a success story, but merely to develop your character, and have fun! Good roleplaying can give great satisfaction, perhaps more so than any other types of games.

So how is good roleplaying achieved? For starters you want to think carefully about your character, and decide exactly what he's like. Many go for the stereotyped 'huge barbarian warrior with a moustache and', while others may prefer the more subtle (and perhaps more challenging) 'young man with spectacles, who appreciates art'. However, he has an unfortunate drug addiction which is growing daily and his local supplier is manipulating him as part of a large fraud operation.' These are, of course, just examples, but let your imagination work in overdrive and try to come up with a 'deep' character — someone who isn't just a series of statistics for strength, agility etc. Having done this the roleplaying becomes much easier.

In most of the roleplaying games on the market the GM will try to lead you to where action may be levelled, or give you a hint as to what you're looking for. The type of these will vary from game to game. Some games are more combat-orientated — the leads will be reports of battles or where treasure can be found. In other games these leads may be you overhearing these talk of their next job, or even more mundane things such as a bar job vacancy that's going (always a good place to hear what's going on). In fitting in your storyline you may decide to follow up some rumour you overheard, or perhaps the thought, totally ignore them and come up with your own scheme — the choice is all yours.

Turnsheets are arranged in different ways, but they usually give you space to enter a series of instructions for a period of

time. Try to justify your actions as to how your character would really react. If you're playing a wing which never does anything brave in his life, don't make him take on a bunch of muggers — perhaps more realistically he'd hide, and they'd not hit him! It's often a good move to also detail some of the emotions and thoughts your character is going through — these add enjoyment for the GM and let him see that you're trying hard to make the most of the game. GMs love enthusiastic players.

Finally, quite often an action will fail, and you don't really want to waste a whole turn because of this. For this reason it's a good idea to give the GM options. If it's sunny I'll stay on the stall all day, and pick the pocket of any helpless looking individuals, but if it's rainy I'll go into the bar and drown my sorrows! One last piece of advice — have fun. If you don't you

shouldn't be playing! Good luck.

And on that note another column comes to an end. As I've said before, please send in your views on the column and PBM in general to: **Play update, TGM, PO Box 10, Ludlow, Shropshire SY8 1SE.**

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Cheppie Ltd: 6 Grenfell
Gardens, Edinburgh ED5
1AX.

MJR Games: 43 Cromwell
Ave, Whalley Range,
Manchester M15.



Master of the universe

Space Master — The Roleplaying Game

Iron Crown Enterprises (£20.95)

Space Master is a descendant of another ICG game, the fantasy RPG *Rune Master* (which is relative to the roleplaying game of the future universe, *Star Wars Roleplaying*). The rules systems are completely compatible, so it's quite possible to combine the two games and mingle sci-fi with fantasy.



Although a considerable amount of background detail is provided for one particular future universe, the rules are adaptable to any creative setting you wish. Consequently the scene has to be long, boring, dull or even worse than even background material to set a setting other than the one provided with the game, but it's a great strength of *Space Master* that its rules system is so flexible. This flexibility has a price, though, and one which not all players will want to pay. *Space Master* is COMPULSORY! In the three rulebooks in the boxed set contain the player will well over 300 pages of densely packed rule descriptions, charts and tables. The emphasis is very much on detail and ease of reference for experienced players. For example, the first of the three rulebooks deals with the system of character generation, combat rules and character skills. Whereas many games would include a tedious introduction to general roleplaying concepts and an overview of the game system, just a cou-

ple of pages into the *Space Master* rules. The reader is already being confronted with uncompromising statements that would leave any beginner.

The rules, once you get to know them, work pretty smoothly. Unlike many games where play can go the rounds without the rulebook being needed, *Space Master* does require frequent reference to its many tables and charts. The character skill system is a hybrid of the character level concept of games like *Dungeons and Dragons* and the more generalized systems of many recent games. A huge range of different skills are detailed to describe the various abilities of individuals in the game, ranging from practical day-to-day necessities such as first aid, communications and hyperspace piloting to such varied talents as entrepreneurship, singing, meditation and, of course, inventing. As in D&D, a character improves as he gains experience points, which reward successful actions by the character. These can be gained by defeating an enemy in combat, by solving a crucial problem or even by being seriously wounded in a fight. A nice touch is that the number of points gained for a particular action depends on how many times the character concerned has been exposed to that situation. The first time an engineer fixes a busted robot or a gunner takes up an enemy fighter the character receives a comparatively large number of experience points, but the character will learn less by doing the same thing again and so would receive less points.

Once a sufficient number of points have been collected the character can advance to a higher experience level. Unlike the D&D system, the character's player can choose the precise skill benefits that his improvement leads to, picking particular abilities to increase and to allowing the character to specialize in whatever way is desired.

The *Space Master* combat system is, fairly straightfor-

ward in play. Most actions are resolved using an open-ended die roll — if the dice come up particularly high, the dice are re-rolled and the new result added to the first. If the second number is sufficiently high, the re-rolling continues. Similarly if a roll is very low another roll is made and subtracted from it. In this way it is occasionally possible for scores greatly outside the normal range. So even the most unaccomplished character has a chance of falling their opponent with a lucky Master Roll.

One of the most interesting parts of the whole game are the extensive official list and handy tables, giving in often graphic detail the effects of such exceptionally good or exceptionally bad dice rolls. For example, several strokes take out the liver, spleen and intestines. Poor dice rolls for one enemy round and those drops it and crush.

After character generation and combat rules, the players book goes on to detail the remainder of the general rule system and then gives a comprehensive section covering possible extensions, such as interplanetary and interstellar. The book concludes with a reference section and index.

The ICG book contains material that only referees will need. The first section provides the tables and charts needed to generate or random realistic solar systems, including calculations of size, climate and possible intelligent inhabitants for planets. There are also neat sections on adventure ideas and provide campaign settings. The second half of the book gives the background of the *Terran Star Empire*, a feudal society slightly reminiscent of the universe of Frank Herbert's *Dune*. This background provides a historical introduction to the formation of the Empire and its people, technology and politics. The book concludes with an introductory adventure.

Left of the set is the *Tech Book*, which details the varied and wonderful technology of the *Space Master* system. Everything your character could possibly need is here, with weapons, costumes and artefacts of every shape and form, plus more mundane items like clothing, medical equipment and survival gear. The final item in the boxed set



is a colour starmap of the nearest worlds to the earth — not as detailed as the amazing *Star Star Atlas* in £200.00, but a useful touch.

Space Master is complex and comprehensive. The rules system isn't as stream-lined as it could be, but it covers a great variety of situations. It is also very flexible — not only can it be combined directly with the *Rune Master* fantasy rules, but there is also a detailed stand-alone combat game available, titled *Star Strike*, that allows players to use their *Space Master* characters in mini or campaign. The level of background information included on a whole range of future technology and the wide variety of skills available to players or characters means that *Space Master* really can be used with almost any science-fiction setting, and the *Terran Star Empire* is a universe full of adventure.

Not everyone will like *Space Master*. The rules make few concessions to ease of learning, and players without experience of other rules will have a fairly tough time. But as a detailed, flexible, comprehensive system it has a lot to commend it.



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OUR MAN IN

ヨシやちもお京東

Is the Game Boy already doomed? Why is a randy comic strip turning into a computer game? Keeping an eye on the future often means keeping an eye on the continent. Shintaro Kanaoya reports on all that's new and lively in console-orientated Japan.

The CD-ROM would seem to be far *Atari* than expected, mentioned last month, which will be released on both ROM and CD. It looks as though the CD version will be a failure to boot.

The CD version comes out a month earlier and includes all the demo and music from the arcade machine. It's also by around £5 cheaper. ROM card owners definitely lose out — but when you pay almost £200 for a CD-ROM unit, you expect better deals.

On the subject of price, *Atari* (Japanese FM, for *Atari*) has imposed a new tax on almost all items in Japan. This, of course, includes computers and their related items. Therefore prices will go up. But don't worry. The tax rate is a mere 2% which, considering income tax has been lowered and that *Atari's* VAT is a staggering 15%, these won't really hurt to worry about. Games will go up by roughly 10p and the PC Engine by about £3.

Back to far more interesting items... *Maikong*, the popular



Top right: *Maikong* right: the artwork from *Maikong* series, how super-crunching *Maikong*

Chinese game played to four players, in which the bearing various designs are chosen and discarded until one player has an entire hand, will be brought to the Engine under the guise of *Maikong* School but very relevant here indeed that this game contains a novel twist. Using the age-old favourite slot 'n' violence this is a bit like strip poker, except with *Maikong*. These have been hugely popular in arcades, looking glibly at the back. The violence? That is provided by playing a male computer opponent. When you win, you see a close-up of his face and a big go crashing into it. At the end, he looks more than *Reilly* at the end of said film (or, I guess, even at the beginning).

But with the PC Engine, which is gradually taking over where *Nintendo* 8-bits seem to be fading off, you can expect the release of these games soon. *Jack Nicklaus Golf*, *Monster Boy 2*, *Monster Land* (CD only), *Demolition Power* (CD), *Knightrider Special* — basically the *Nintendo* version on the

Engine — and *Atari* 2.

The conversion of *City Hunter* is one that I am desperate to see. It's based on a comic character who is fabulously wealthy, the Cat (Hunter), good at fighting and is an *007* at heart. Like *The Godfather*, but younger, he advertises to solve problems, but most of the time ends up bodyguarding ladies of very attractive young women.

The comic art is superb and the humour huge. It is interesting to see whether the programmers have managed to convey the feel of the comic book on the TV screen. *City Hunter* is the randiest thing on two legs and it is seems a suit. You won't see him for dust. He also possesses a rather large backside which is so powerful, it can stop the many blows he receives. It's currently running in Japan's most popular weekly; if you see a volume of the collected stories in any Japanese book shop, like *Quax* in London, BUY IT. You will be laughing. I guarantee. By the way, a can-

Welcome back. I'd like to start this month with some news that may prompt all you PC Engine owners to go out and buy a CD-ROM unit. Hudson, the makers of *R-Type*, are considering releasing *R-Type*, but this time on the CD-ROM. They say that the way they will be able to get all the original sound from the arcade machine plus the whole game onto one CD. This would seem pointless, however, considering that almost all PC Engine games would already undoubtedly have, or at least played, the original near-perfect conversion.

A much better way of using

JAPAN



Resulting action from Double Dragon
remake tell. Street and Laird in World
of Super Wonder (Big 2)

version of the arcade game, *Atari's* *Robot Kid* is also planned.

The Nintendo refuses to die gracefully. Two big games this summer are Dragon's Quest 4 (known in the US as *Dragon Warrior*) and Nintendo's *Legend of Zelda*. Mother, Guess what? It's an RPG. God give me strength.

Hostages, planned for November, looks like fun. *Double Dragon 2*, however, is a different kettle of potatoes entirely. The original, would you believe, was a two-player. Amazing how companies just forget a game's greatest strength. DDP is, thankfully, two-player and looks like what DD should have been. In Japan, a December release.

Some of you may have heard of *Avax* (also, a Japanese distributor whose films include *Temple of the Dragon King* for the last year) and *A. T. King* (who's the latter is to be converted to the Nintendo. But you can't wait).

For more exciting is *RoboCop*. With perhaps some

of the best Nintendo graphics ever, the game looks to be an arcade buster. Similar in style to the arcade, *RoboCop* can now punch, crouch, defend and use three types of gun. A target practice scene is also present. This may prompt you, if you have a Nintendo, to blow the dust off a play *RoboCop*. I wouldn't expect a British release until at least the next Mini Olympics. Still, you can always hope.

Finally on the Nintendo, there's *World Super Tennis* which features two players who probably hoped to go further than the semi-finals at Wimbledon, Chris Evert and Ivan Lendl. Also expect *Splatter House* which looks strangely cute; *Top Gun*, *The Second Mission* and *Mile Killing*. Regarding the latter, you may have seen these strange machines in Britain where little people enter, pop up and you hit them with a plastic hammer (BSPCA be warned). The Nintendo version uses a rail, not unlike the Family Trainer (the mail which you can on and a little mail can on the screen, remember?). A hammer is also provided, for cruel and sadistic mail-crushing.

At the recent Tokyo Toy Show, the toyhobbyists' show, hand-helds were the order of the day. Konami, strong Nintendo supporter and creator of *Nemesis* and other great games, are releasing a long of games for their hand-held. Come (*Conquest*), *Top Gun*, *Nemesis*, *Double Dragon*, *Gradus*, *Skate or Die* and *Teenage Mutant Ninja Turtles* (new title). Despite being in color, the graphics are simple, with each one dedicated to one game. Sega's hand-held *Super Hang On*, *Thunder Blade* and *Kanari* were also there, under the title of the *Game Vision Series*. (Some of these are available in the UK at places like *Deans*.)

On the new supposedly banned *Game Boy* are *Satan* and *Hyper Lode Runner*. Chances, but showing games, especially newbies, who waiting for a train. Apart from those puzzle games (*Dot*, *Microcosm*), *Maniacs*, and *BattleShip*. With the two-player link, the latter could be tremendous fun.

Also at the Show was a string



Dangerous, rarely funny and pre-occupied of the most powerful hands, the City Hunter — here of the Japanese film comic — is making his way onto computer screen

of new, and eagerly-awaited, PC Engine peripherals. All carry the 'booster' suffix on the end, they include an *AudioBooster* (illustration), *PrintBooster*, a printer with a memory of Japanese AND Chinese characters, so it doubles as a mini word processor. Actually I'll later explain this.

In Japan, we use Chinese characters as well as two basic alphabets of 50 letters each. There are over 8000 characters that are known as *Kanji*. Because a typewriter could not have 7000 keys or even 50 for the basic set (not even in Japan), our typewriters use the same keys as English typewriters — giving two basic characters on each key (26x26). So when you type in a word, the word processor displays on the screen a selection of *Kanji* that can be used for that word. You then choose the correct one and you're off. It may seem complicated, but once familiar with the system, it's pretty easy.

The *AudioBooster* and the *PrintBooster* are collectively known as the *Core Unit*, and are actually a graphics tablet and printer. Also stuck in the

pipeline is a modern, place are for global games playing, ordering shopping (just like in *San San* it, but in real life), and checking on those all-important share prices. The PC Engine, your complete family management machine. You need never walk out of the house again.

As detailed last month, Hudson's battery backup system looks set to be called *The Voice of Heaven 2*. It must have missed the first one! NEC are rumored to be making their own one. The name? The *Boeing Backup Booster*.

And that is almost it, except that *Atari* may come out on the CD-ROM-based. *Hit* *Tycoon* (at around £1,000 you won't see me buying one for review), next month, will be out on the streets of Japan, compiling the legend Japanese report for the hottest map. Unfortunately, I'll have to make room for *Maniacs* 'Moneyball' *Rosenthal* in next issue, as he brings you his eight-page supplement on American developments. So expect the complete guide to shopping in Japan in issue 24. Travel the world with *The Games Machine*, and all next we meet, sayonara.



A selection of some of the more exotic hand-held games available in Japan

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PALACE SOFTWARE



DOUBLE VISION, DOUBLE FUN

Win the original artwork for Xybots

Just take a look at the illustration on this page. Seem familiar? Well, it's the artwork to Tengen/Domark's latest hit game, *Xybots*. However, you'll have never seen artwork like this before, because just before the artwork pictured here was used, Domark decided to change the brief for top artist Steiner Lund. The characters in the final artwork, as seen in the Domark advertisements, are actually firing out of the picture.

So, as you can imagine, the original Steiner Lund artwork is a real collectors' item. And, as a TGM reader, you stand a

high chance of winning this superb, framed picture, based on last issue's hit Tengen coin-up conversion. Just answer the three questions below, and you could have the delightful artwork hanging on your living room wall.

1. What was Domark's first ever game?
 - a) Star Wars;
 - b) Friday the 13th;
 - c) Eureka.
2. What is Domark's latest puzzle game?
 - a) Trivial Pursuit;
 - b) Pictionary;
 - c) Monopoly.

3. What partnership appears in *Xybots*?

- a) Laurel and Hardy;
- b) Gum and Russel;
- c) Hardy and Gurn.

Send your answers on the back of a postcard to EX 9911 BOTS Comp, TGM, PG Box 18, Ludlow, Shropshire SY8 1QB. First-prize winner will receive the original, framed artwork by Steiner Lund, and ten runners-up each win a copy of *Xybots* on their format (please specify cassette or disk). Entries in by 14 September.



ST SHOWDOWN

In America computer shows are as regular as Phil Donahue shows, and it's hard to keep track of them all. Marshall W. Rosenfeld sends this report on the latest StateSide Atari show (yes, TWOT). The ST gets supercharged, multitasked and reveals its 4096 colours, while the old Atari XL/XL receives an amazing graphics cartridge.

Life can be confusing. A few years ago, some of the best games ever being produced in the States, while great productivity and business programs sailed from Britain, Germany and France, among others. Today most of the games coming from Europe, while American developers seem to be concentrating more on hardware and utilities. ST shows are only a recent phenomenon in the States, and when I learned the best time to see that just occurred (one in Disneyland and the other in Michigan).

Nextek plays the conventional (and limited) ST desktop into the real graphical interface world, images having the same kind of graphic choices and control as found on Amiga and Iliacs. Missing different icons as you see fit — a picture of a paint brush for drawing program, or a typewriter for a word processor. Plus the ability to move icons OUTSIDE of windows and around the desktop. Plus additional features such as being able to move one window behind another. The program has been heavily updated, is more dependable than ever, and uses less of the precious RAM on start-up.



Now that you're a hot desktop, try using it with Add More from Codehead Software. Hot titles is to make programs what a Pagan is to baby's buggy. A sequence of events can be activated with a single keystroke — thus eliminating the tedium of having to set up for each program. It's the next best thing to having someone else do it for you, while you sit back. One outstanding feature is that the program repairs the problematic issue — allowing startup files to be placed anywhere on disk.

An program for the ST are few and far between in the States. De Vira Designer adds to the ranks with a number of nifty features — besides the usual drawing functions too obvious to mention (yes it does lines, boxes and uses the mouse). Some of the unusual functions are 3-D distort, tint and tiling, plus a magnifying tool that constantly updates the image. Another feature of value is a Stereo mode. This can be used to look and pretend certain colours — enabling an image to be moved behind or inside of them. Lockable backgrounds and an animation format add to the mix.

An inexpensive alteration of the colour palette can be had by installing JRI's \$74059G. This ups the ante from a palette of 512 to 4096 for more colour choices, for 18 colours chosen from 16 levels (as opposed to the normal 16). The ST was always capable of doing this, according to designer John Russell, but because of some bad circuitry Atari had to "trap" the accessing of this extra bit-plane in TOS and negate it from being used.

The unit consists of a board you pull out the Atari 5200 Chip, plug it in the board and replace the board on the Shifter's non-open socket. An additional Shifter Chip is also required (#C02614-26 or #C02701-802), and can be gotten directly from JRI if necessary. Be smart and go to an electronics store for the proper tools to take out the chips if you decide to handle this yourself.

JRI also includes a software patch for Newhouse — so as to

access the increased palette — and a software program. The digitized images look very good due to the increased colour palette (skin tones, reddish subtle shades). Documentation gives all the information needed to put in the board, installation for any of it is taking about 30 minutes.

JRI also has a more radical product, so those with a bit more nerve can give the Jato accelerator board a try. But be aware that this requires soldering which will invalidate the ST warranty. This is due to Jato having its own 68000 chip — the CPU must be unsoldered and replaced with a socket for Jato to plug into, but there are no cutting of traces or jumpers to deal with. Jato includes a hardware switch for three programs that can't tolerate higher speeds (like games), with the switch hanging out for inside the back of the ST. Resists are the ST's new rate at 18 Mhz — twice its normal speed — with internal data processing. It maintains the standard 68 Mhz timing with the other computer chips for compatibility. A red LED is also attached, and indicates the strength of the board by the intensity of its glow. A shareware program, QuickIndex, is included, which allows performance data to be measured.

The instructions for installation of the board are comprehensive, but not to be undertaken by the weekend hobbyist. Jato's only drawback is that it can't work with machines that have RAM chips rated slower than 120 Mhz (name seconds). So look at your chips before taking the plunge.

Interestingly enough, there's been a lot of talk about the lack of Genlocks for the ST, but JRI has had one here in the States for close to a year now. The unit does exactly what a Genlock should: gear the signal from the ST to coincide with a composite video signal for a monitor or image. It's perfect for interface with the front of the ST, only those users can avail themselves of this unit. But at least the option exists.

MIDI Tigers

Musicians have found En T's line of MIDI software excellent — and the tradition continues with Tiger (The Interactive Graphic Editor). Tiger is a completely graphic-oriented music composition program; with draw and edit operations active while you play. You can display up to three musical tracks and eight controllers at once, while notes are being drawn and edited onscreen (in groups as well if desired). Notes and phrases can be drawn or played in with the mouse or using a keyboard. A sequencer can be used in conjunction with the program, or Tiger can be used as a stand-alone application playing and editing KGS (Dr T's programs) or

"Hot Wires is to macro programs what a Ferrari is to a baby's buggy"



Photography by
Marshall W. Rosenfeld

Sweating up your ST is easy with the Jato Accelerator board right, although at the expense of your warranty, and a StateSide variety — De Vira Designer (below), an art utility with some superb and nifty new features such as stereo



standard MIDI files. It's a bit like taking nineteenth century piano-roll notation, and adding twentieth century point and click computer graphics.

Specs and the GCR cartridge (see this month's Emulation feature, page 37) have a lot of competition in Haggis Computer's Discovery Cartridge. This unit allows for Mac emulation, and ST program copying. New (though perhaps more limited than the GCR) is their Q-venter, designed to facilitate the transfer of Mac disks to the ST — using only ST drives.

More than just a paint program is Touch Up from Miragraph Software. Requiring one megabyte of memory (and a double-ended drive — all the new STOs have these, so check if yours is an early model), it works in 4-bit or more mode only, and gives you unlimited screen size to work with, depending on memory (you scroll around a virtual window and use icons to select functions). Four zoom levels, out and paste, rotation, resizing, plus erasing tools and the ability to edit at pixel level make Touch Up a powerful tool. There's even outline outline fonts in ten typefaces to choose from — plus 88 text patterns. The images can be brought in and saved out in many formats, including: IMG, PCX, TIF, Degas and MacPaint, among others. Version 1.5 now eliminates the dreaded key copy-protection, and adds features as well. A very classy slide program is also bundled.

Getting these images for this, and other art programs, can be done with Miragraph's new Hand Scanner. It covers a four-inch wide area in a single sweep, and provides four scanning resolutions: 100, 200, 300 and 400 dots per inch (dpi). Contrast can be adjusted, as well as four different patterns for scanning line art and halftones. Images can be saved on the same format as Touch Up. Miragraph is packaging Touch Up Lite with the

scanner at a combined lower price.

Saving those images is usually a lot easier with a hard disk, but every user of one knows the trouble in making backups. DVT (by Seymour-Radio) lets you store up to one megabyte a minute from your ST's hard disk in a 10MB video recorder cassette. The cartridge has two phone plugs that connect to the Video In/Out sockets of the VCR — which should be set at the fastest speed. Turn on the VCR in the correct mode (play for read, record for save) and let the software take over.

For those of you who don't believe in time-shifting (or don't have a VCR), there's Diamond Back from Data Innovations. This backup/restoration program is entirely GEM-based, and automatically compresses/expands files to and from a floppy disk.

Now for all those Atari users out there, looking with adoring eyes at the 18-bit graphics (but with empty wallets at the moment). Take heart. Resave Software's Diamond CR cartridge creates a graphic interface on the Atari 5850. Imagine browsing up with accessible windows (up to four at a time) and icons. Programs can be accessed and run using a mouse-simulated control. It gets really nifty when you use Resave's line of graphics programs — the Diamond Paint which has cut and paste, and impressive sections of screen. Soon to come to the 5850, range of 8-bit Ataris will be Diamond Write. Resave's 60-column word processor.

Back to the 58500, we end this sneak preview of American ST products with the elegant Revolver from Florida-based utility producer Intersect. It's an all-purpose software package that loads into protected memory on bootup. Revolver has a host of important and useful functions, one being a way to get around the problem of a lack of multitasking on the ST, the

program quickly and efficiently creates sections of memory — installing a T40007 to have two blocks of 4096K RAM, and a bit left over for desktop accessories. Using this configuration allows you to load a database in one block, and a word processor in the other. For instance, instant switching can be accomplished with a series of keystrokes, as well as a main menu which can be referenced at any time.

The menu allows a number of functions. Besides RAM disk and printer spooler control (using a printer and the computer simulate), system information and configuration can be carried out. A disk menu allows formatting and making folders, plus all the other usual functions — it also provides for a Degas-compatible screen snapshot mode. To add to all of the above, there's the sub-window function. Promises that the program is well-balanced (some games will not allow this), Revolver is able to save a compressed file of everything occurring onscreen. This can be automatically updated too, and then rolled in at a later time. Quite a lot for one package.



Multitasking with Revolver (top), and a sequence of events can be activated with a single keystroke with Hot Selling (below). Below: the miracle of Touch Up



MAKE THE MOST OF TGM

As you will have seen from reading this article, there's a helluva lot of development going on in the States. TGM will be keeping a close eye on all the shows (ST, Amiga and PC) in an effort to bring you news of the expanding market of new technology long before anyone else.

However, some of the items featured may not see the light of day in the UK through official outlets. Only imports of all the best hardware

will undoubtedly appear, although it will be months after the US release. To benefit fully from the latest American news in TGM, and get what you want NOW, you must take advantage of the American addresses that we print.

If you fancy any of the items we mention, write to the company requesting more information on the product (send the letter by Air Mail, and include an international reply envelope if possible,

that way you'll get some idea of how long it takes that company to deal with a request). If you're satisfied with their service, then either send them an international money order, or even better (if you can) check exchange rate BEFORE paying, to get an idea of sterling equivalent). Follow these steps and you won't go far wrong. And make sure everything's compatible with your model of computer!

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You could be forgiven for thinking that Bullfrog Productions were a relatively new programming force. Only recently, with the release of the excellent *Populous*, have they been afforded their share of the limelight. But they have, in fact, been programming on 16-bit computers for a good few years. Robin Condy taught off words and a rail strike just to bring you their story.

Ribbeting stuff

Bullfrog is a close knit team of six. Founded by Peter Molyneux and Les Edgar, it is in fact a subsidiary of Taurus, a programming company that produces application packages (Acquisition, X-CAD and Adram) for the Amiga. Despite attempts by Commodore to push their machine to the business sector, the Amiga market gradually turned towards entertainment software. So rather than fight the trend, Bullfrog was created and took the plunge into the world of games software.

The current team consists of Peter Molyneux (programming), Glen Cooper (programming and graphics), Les Edgar (administration), Kevin Conker (programming), Shaun Cooper (programming) and Andy Jones (graphics).

To gain experience in the games market, Bullfrog took on the 16-bit conversions of *Grand II* from Firebird. At the time Firebird's prod-

uct manager had just left; the game received little promotion and wasn't a success. Their next project, and their last original game, *Ruon*, took longer to program than anticipated, and was finally released through Electronic Arts. Out of these teaching problems *Populous* was born.

Peter Molyneux: By the time work on *Populous* had begun we were working more professionally. We created a development environment where we could develop on the ST and Amiga at the same time. We also started to have Friday meetings where we could discuss the progress of projects and new ideas. *Populous* was really spawned from one of these meetings. Glen got fed up with designing graphics and he wrote this routine to do the main display, we then used Lego bricks to simulate the landscape. The game basically grew from there.

Finding inspiration can be the

hardest part of any programming project. Bullfrog use that tried and tested method of going down the pub. Unfortunately Shaun has a nasty habit of being talked out by the scruff of his neck, so they've had to resort to alternative methods. Peter Molyneux explains:

"There are a lot of good programmers out there and the only way we feel we can be as good as everybody else is to keep coming up with good ideas rather than to work for ten years on a vector routine and come up with one a frame faster than everyone else."

We've tried creating a big long spec, list and detailing every aspect of the game and then getting someone to program it all in, but the result was actually quite boring so we scrapped that method. We've also tried quickly programming an idea in and then trying to build a game around it, but that didn't produce anything that we liked.

Now when we develop a game we get it to a certain stage then we all sit around playing it. If we don't like it, the project is scrapped, after all we can't expect people to buy



"We can't expect people to buy our games if we don't like them ourselves"

...and are the public certainly third — Populous



our games if we don't like them ourselves.

I don't think you can spend out a whole game before programming; certainly not the type of games we do. When you think of an idea, you've got no idea how it feels;

hard disk is full of them. I don't think it would be possible for us to spend months copped up in a little office programming if we didn't enjoy playing games.

While many software houses program games on expensive development systems, Bullfrog prefer to work on the machines that the games are intended to. Graphics are designed using either Deluxe Paint III on the Amiga or Art Studio on the ST. While Hord's Dexpac is used to assemble the code.

We develop on the ST and Amiga simultaneously. With Populous we started out the ST then transferred to the Amiga and then back to the ST again. Putting games across from the ST to the Amiga seems to be controversial at the moment, but what people tend to forget is that the Amiga is a slower machine. Obviously with games that rely heavily on graphics, such as role-strategy, it is important to use the Amiga's extra features. If you're not using the latter (which we don't) in Populous then the game slows down tremendously. Even with the better, reliable processing time is easily eaten up. A 32-colour Populous would have looked nice but would have played a lot slower. As it was, we were running out of memory towards the end of development, so a 32-colour version probably wouldn't have been possible.

To us the most important aspect of a game is playability. We try to think that if someone spends £24 on one of our games they should get 24 hours of enjoyment from it.

At the moment Bullfrog are working on three projects, two for Electronic Arts, which should be available early next year, and a third as yet unnamed. When a name is chosen for a game it has to be checked out to see if anyone else owns the copyright for that name. This process is currently going on with the latest Bullfrog projects so we can't reveal any names yet. However, TCM can reveal a few exclusive details on the forthcoming games.

Project A appears to be a cross between Lords of Midnight and

Populous. Some of the Bullfrog team has had much experience playing strategy games, and rather than draw on preconceived ideas of what a strategy game should be like they've used their experience to design the type of strategy game they would like to play.

What you've got is a view rather like Populous except it is based on vectors instead of blocks. Vectors give Bullfrog a greater degree of freedom with the graphics. There are now landscaped features such as waterfalls. The landscape can also be rotated, so nothing remains hidden, while a zoom in/out feature lets you examine points of interest in more detail. The objective of the game hasn't been decided upon yet but there are numerous war-mongering tribes rendering the landscape who you will have to interact with.

One of the novel aspects of Populous was the simultaneous two-player game. Project A will allow six Amigas to be linked together for a truly epic game.

Project B is a world apart from Populous, but in a way it's a sort of puzzle game based on how water always finds its level. The player controls a catfish that grows and mutates while water gradually fills the maze, ultimately flooding it.

Bullfrog are keeping tight liped about the final project. It is expected to take 18 months to develop and if their current projects are anything to go by it should be truly amazing.

And the future?

Peter: I hope there will be a return to developing original games. I think that arcade businesses are going to die a death.

Glen: The Amiga is further behind today's arcade machines than the 64 was four years ago.

Peter: The routines on Attebuster were great. They were probably as fast as you get them but the game was still rubbish. Arcade games are getting more and more sophisticated and the poor old ST and Amiga won't be able to keep up. I hope more people will start to design original software. A good idea doesn't take a long time to program. Tetris was created on the Apple Macintosh in about a day. Eventually we will have to start developing for the consoles but there isn't a decent console solely available over here yet.

I can't see us returning to business software. Entertainment software is so much more fun to program and you don't have to be so diligent. You don't have to produce 300-page manuals or give after-sales technical support. However, I think that our background in professional software has meant that we're got a completely different approach to programming. We're going to be programming games for a good while yet.



Leapfrogging to the top, the six Bullfrogs (left) contemplate Projects A and B, one of which can be seen on the screen above

whether it's going to be fast and furious or slowburn. You can't tell how a game is going to turn out just from a piece of paper. The best thing to do is to get in there and play. I love playing games. The PC

Emlyn Hughes



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Far from the peace and quiet of Corinthian columns and ivy-clad arches, Paul Rigby discovers that it's the lure of outer space that is drawing the adventure and strategy crowds at the moment. But before the reviews, here's the adventure news...

They say that "Time waits for no man". Well, neither, it seems, do Infocom. Not content with watching adventure players struggle over *Shogun*, *Journey* and *Zen*, Infocom have announced a new RPG called *Minds of Men*. It will, according to Infocom, be released around October and have "a type of interface not dissimilar from that found in *Star Trek*".

Apparently, though, it is a totally new concept, developed by Westwood Associates, who have no connection to *Star Trek*.

Eyes, kings of the sports simulation, have decided to dig their track shoes into the routines of the RPG. Called the *Crusicon* conspiracy, *Eyris* space RPG is intriguing. Listen to the hype: "You'll be tempted by cheap booze, wild sex and mind-altering drugs. You'll be chased across six planets by crazed religious cultists, vicious druid assassins and horny women. You'll have the time of your life. Can't wait."

Space is proving a popular theme. Now *World Computing* (*Might & Magic*) have also been beavering away on a spacey RPG, it's currently called *Space: The Game*.

Have you noticed that Intersplay have been rather quiet lately? Too quiet, you might say. Well, it appears that the chaps who brought us *The Earth* file are soon to unleash *Dragon Wars*, while the *Wasteland* team are working on a time-travel game called, at the moment, *Master Time*. Finally, look out for *Level 9's Scaphepod* which may be out and about soon as you read these words. Apparently, *Scaphepod* will not arrive with the customary month. I asked Level 9's Mike Austin why, he said that there wasn't much point as you are dead at the beginning of the game, anyway. Hee-hee, I'm not sure about that, but there you go.

I've looking forward to previewing the five-part adventure, *Bayd*, of a Kenney by M&M Games for the C64. M&M describe themselves as "home producers" of adventures. They're searching for adventure writers and adventures to publish.

M&M Games: 2 Duke Close, Bramhall, Stockport, Cheshire SK7 2JQ.

Thanks to Sue Maxwell, Moddy and John "Scaphepod" Barnsley for the copy of their new SF adventure magazine, *Star Trek*. Packed full of reviews, hints and tips, screenshots, letters etc, Syntex

is an enjoyable read and well worth the £3.50 asking price.

Syntex: 5 Warwick Road, Sidcup, Kent DA14 6LJ.

Another excellent magazine I've been reading with my cousin is the *Adventure Center* devoted to creating adventures, using all of the adventure styles, as well as machine code. Issue One includes a very revealing review of the GAC.

Chris Hester (Editor): 3 West Lane, Baulton, Nr Shipley, West Yorkshire BD17 5AD.

Piece of gossip of the month? Well, this one is pretty old, but I still chuckle when I picture it.

It so happens that the offices at Electronics Arts are situated in an area which is prone to the odd earth tremor. Anyway, about a year ago, EA offices experienced a rather nasty earthquake, nothing too serious you understand. The story goes that Trip Hawkins, EA President, while sitting at his desk, felt the earth moving beneath him. He then promptly stood up and took a quick look to see if anyone was around. Seeing no-one, Trip jumped up onto his chair, raised his arms and bawled into the air and proceeded to shout: "Go, Earth, Go!"

The point is: would you buy a used car off the man?

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STAR SAGA: ONE (BEYOND THE BOUNDARY) Masterplay

The space plague has ravaged Earth and its colonies. Once an adventurous society, discovering new planets, civilisations, new inventions and advancing science, Earth has now become impoverished, terrified of another plague. The boundary, enforced by the Space Police, has served to keep out any outsiders. You can leave, of course, but just try getting back in. *Star Saga: One* (1991) focuses on six people who want, for their own reasons, to cross the Boundary.

1991, previewed in last month's shadow software feature, comes complete with six 12-page character booklets; 13 game booklets (each of about 48 pages); a colour map and counters; the mysterious Document Two, game disk and a 48-page resolution book.

1991 is a breakthrough in computer-based roleplaying. We've had one player controlling one character, or a team of player-characters — like *Imagawaka's* *Witchlight* — but never have we had the

The ADVENTURE STRATEGY ROLEPLAY Column



ST (also on Amiga, PC) £29.99 QUEST FOR THE TIME BIRD Infogrames

Your quest is to stop the rogue god, Rame, from escaping his prison (a castle — no I don't know why either) and avoiding general havoc. You must recover the clock and the Time Med. Only then can the incantations be said to save the world. To do this you control a maximum of four characters in the process.

Time Bird was written by the chaps who produced *Planescape's* in the *Wing* so whilst playing Time Bird I waited, with bated breath, for the four to collapse to reveal, yet another, empty Infogrames adventure. However, Time Bird is not that bad. In fact



ability to control up to six players, each with their own character and each with their own task. All six (you can play solo — or up to six players) can wander around the game world getting on with their own business, each mapping new locations, each conversing with different alien races and each presented with different problems. The amazing thing is it is possible to never meet another player-character!

You can, of course. In fact, you will find it advantageous to cooperate later in the game, if not before. The Universe is a big place. You'll need all the help you can get. OSI operates by using the computer as a *Character Master* (CM). The computer moderates combat, keeps track of player locations, handles trade transactions and updates personal possessions. In addition, it directs each player to read a suitable paragraph, in one of the booklets, when the situation calls for it. The game does not have any graphics — but who needs them when you've got reams of prose, that Infocom would be proud of. You keep track of your position in space by using the colour map and counters. Planets can be explored (each with their own situations, social problems, customs etc), items can be traded, skills can be learned and so on. In fact the trading area is the way you upgrade your presen-

it's pretty good. The graphics are wonderful, whilst the appropriate sound effects, on the ST, are excellent.

The adventure is cast-driven. Actions are executed via a combination of mouse clicks, in addition to a variety of multiple choice menus.

However, the system can be frustrating. It is easy to click on the wrong part of the graphic which can take you in the wrong direction. Getting back can be difficult. Also, selecting the graphics for items is pure luck as they are positioned in obscure places. You must, basically, search every inch of the picture — which can be very time consuming. I'll give you an example. At the start of the game I happened to click (purely by accident, of course) on the simple drawing of one young lady. This brought the message: 'Let's not forget this too. We'll be needing it.'



A	Presentation	94%
	Interaction	68%
	Atmosphere	88%
	System	72%
	Overall	76%

tation (ship events, weaponry, defensive armour etc). The one drawback is that, although you are presented with detailed reports, you do not have a great deal of control over combat routines (which has lowered the ratings, somewhat).

I consider *Star Wars*: One to be as important a release, if not more so, than *Dungeon Master*. For the first time, tabletop RPGs come to the computer. The combat routines could be improved as could the intermission. However, when it comes down to it you have to say that OSI is atmospheric, exciting and, the best thing is, when you have completed the game as one character you can switch to another and start all over again! The price is very high, I know, but however you do it, save up, split the cost six ways with a few friends, whatever — buy this game!

Available from: Computer Adventure World, Bank Buildings, 1A Cheapside Cross, Birmingham B41 6EU.

R	Attributes	80%
	Engagement	70%
	Presentation	90%
	Atmosphere	92%
	Interaction	76%
	Overall	81%

Spectrum £12.95

AUSTERLITZ 1805 ccs

Ken Wright appears again as one of the few wargame authors who regularly write for the Spectrum. With a string of successes behind him Ken, has taken the system used in Wellington at Waterloo and produced the latest day during the French campaign when Napoleon decided to abandon the British invasion and concentrate, instead, on Russia, which led to Napoleon's famous victory on the field of Austerlitz.

Austerlitz 1805 arrives with one tape and a 30-page booklet which contains the instructions, historical data and designer's notes. *Austerlitz* can be played one or two-players, on three levels of difficulty. You can control either the French Army under Napoleon or the Austro-Russian Army



under Kutuzov.

The infantry corps can be organised into line, column or square. Cavalry and artillery make up the rest of your forces. You may, under correct conditions, divide and amalgamate your forces as well as examine them for strength and moral. Moral is a critical modifier as units can rout if moved drops too much. The domino effect of adjacent routing units is always a possibility in this case.

CCS are to be congratulated for their fine packaging for these games (unlike by NewLine's own *Oliver Peay*, no less). Ken Wright is producing an exciting and enjoyable wargame which is a credit to the UK Spectrum. AI and Combat routines work well with good use of limited resources.

Recommended.

S	Presentation	64%
	AI	60%
	Atmosphere	76%
	Engagement	62%
	System	84%
	Overall	63%

ST \$35.95

GRAND FLEET

Simulations Canada

(available from Computer Adventure World, Bank Buildings, 1A Charing Cross, Birmingham B41 8BJ)

Grand Fleet simulates the tactical naval combat in the North Sea during World War I. The packaging arrives with a game disk and two glossy grid maps, with the order of battle for each scenario on the flip side. Two Chronograph pencils complete the package.

Grand Fleet actually simulates the span of 1905-1925, thus covering all types of ships which had any connection with WWI. The player acts as Senior Naval Commander to manoeuvre orders are given to your fleet while general orders are given to the other fleets who are under the direct control of your subordinate commanders.

The game, as mentioned in last month's feature, has no graphics (the display looks very basic) so the 'Flag of War' is paramount. You are only aware of what you can see and what reports you may receive from your commanders. This text-only principle makes for realistic naval situations which effectively simulate the tension and excitement of sea warfare. Any reports you may receive can be transferred to your grid map. However, playing *Grand Fleet* makes you wonder if that last sighting was correct. Did they really see smoke? Was that force estimation accurate? In addition to these factors is the weather (fog, etc.) as well as ships laying smoke and so on.

Grand Fleet is a most innovative response. For sheer tension, unpredictability and realism it cannot be beaten.

S	Presentation	70%
	AI	87%
	Atmosphere	88%
	Engagement	86%
	System	88%
	Overall	81%

PC (also on ST, Amiga) £24.99

LIFE & DEATH

Software Toolworks

Now here's a novelty! This Surgeon Simulator comes with a genuine set of surgeon's gloves and face mask (not included in the retail version). In addition to the manual, needles and mirrors is a history of surgery pamphlet, which really gets you into the mood for some good 'old' style. After an initial visit to the medical clinic you get off to examine your patients. Clicking on their stomachs brings a close-up of their tum into view. Naturally the area may bring a digitised 'Roarrrrr' or 'Hemorrhage!' indicating pain and discomfort. X-rays and ultrasounds can be taken to assist your diagnosis.

If you need to operate you are allowed to pick a good team of assistants who give advice during the op. The actual operation, preceded by a short animated sequence of the patient being wheeled in, is very realistic. A close-up of the stomach is shown,

with your surgical instruments adjacent. You can pick up objects with the mouse and use them on the patient, such as needles. For example, if you make a mistake you are sent to medical school. If the mistake is very serious the patient is sent to the mortuary (graphic included, of course). Life & Death (which is better than The Surgeon, by the way) brings a dash of touch up (typical with demoscenes) to make software.

S	Presentation	89%
	AI	77%
	Atmosphere	88%
	Engagement	86%
	System	88%
	Overall	84%

PC £29.99, C64 £24.99

CURSE OF THE AZURE

BONDS \$51/US Gold

As I mentioned in last month's preview I was not happy with the first AD&D RPG, Pool of Radiance (POR), which I reviewed more than six weeks ago. However, B&B have got their act together with *Curse of the Azure Bonds* (CAB). Two new classes, Paladin and Ranger, high level spells including Raise Dead, and a greater variety of monsters mean that, as far as I'm concerned, this is the best proper AD&D product I've seen from B&B.


The POR system has been retained but enhanced. Another big change regards the actual plot. Basically, your team awake to find that they have been ambushed, captured and cursed with five magical torments which can be seen embedded on one chap's arm at the start of the game. The torments have powers to take control of your character's actions. Your quest? Get rid of them!

The actual storyline is an immense improvement over POR which just presented a set of missions for you to complete. CAB has a deeper, more involved plot which moves at a good pace.

Magic still has to be learned and words read which is okay with me as this system is more realistic and presents the magic users taking a complete hold on the game, which happened in *The Elder's Tale*. The combat system is very good, with the game allowing the player to deal in tactical manoeuvring. A Quick feature allows you to turn a character over to computer control to speed the combat routine. CAB is not perfect, though. A feature to enable the combat to finish in seconds would be an attraction to players who have no real interest in combat. Even with Quick, combat can drag on for 30-45 minutes — you have been warned! The player could have been improved to allow more freedom to interact with NPCs. As it is, you must decide on your general approach to a character, such as 'taught'. The computer takes it from there. Overall, CAB is an excellent RPG, much improved and polished over POR. It is good to see B&B actually improving the system rather than sitting back on their T&R laurels. With a good storyline and excellent graphics, CAB is recommended whatever version you have.



R	Artifacts	92%
	Engagement	90%
	Presentation	90%
	Atmosphere	92%
	Interaction	70%
	Overall	87%

	Leadership	Superheroes
	Combat Skill	25
	Armour Type	Leather
	Weapon Type	Broad Sword
	Combat Speed	38
	Magical Energy	38
	Hit Points	10
	Power Level	12
	Initial army size is from	14 to 26
	Current army size	8
A Brief History:		
<p>Superheroes is one of the few Centuries to take an active interest in human affairs. These would not be called. His spirit was with a background and a spirit of his will to make sure he and his to make a name for himself with.</p>		
You have 75 gold		
Recruit Next Previous Quit		



PC, Atari ST 29.95

RED LIGHTNING SSIUS Gold

Red Lightning attempts to forecast what a third world war confrontation between the NATO and Warsaw Pact forces would be like. The game arrives with a 22-page manual and a colour mapcard which shows, on the reverse, a variety of additional information (unit icons, travel movements etc).

You actually play the Supreme Commander of either set of forces (a two-player game can be selected, and have the option of examining your forces in great detail. There are three scenarios (20-40 turns) with a variety of modifiers

such as a variety of seasons, the use of Special Forces, difficulty level and the use of chemical weapons. In addition, a variety of reports are available (political, weather and so on). Red Lightning exhibits good use of artwork which can attack force concentrations, supply lines and airfields as well as going on reconnaissance.

Red Lightning is probably one of the best presented wargames SSI have produced. I found it a pleasure to use. No obscure, multi-layered manual here. While detail is good, some of the basic research is weak. For example, SSI advocate that the F-117 should perform strike missions. It is designed, solely, for reconnaissance missions. I has about as much strike capability as my big toe. However, even with the odd mistake Red Lightning is a quality product.

S	Presentation	90%
	AI	71%
	Atmosphere	84%
	Engagement	1%
	System	82%
	Overall	84%



PC (Amiga planned spring 1990) £24.95

SPACE M.A.X.

Imagicon/Pinal Premier Software
 Space M.A.X. sees you as the project manager for the world's first commercial space station. The simulation, built, arrives with three disks and a professionally produced, 137-page manual complete with photographs, colour cutaway diagrams, etc. The author of Space M.A.X. was actually involved in the Space Program, developing systems for the Viking, Mariner and Voyager missions.

In the simulation, you are responsible for planning of payloads (for the shuttles and so on), sequencing and assembly of modules (habitation, astrophysics lab etc) of the space station, production of lots and manufacturing. The upshot being, you must launch, assemble and operate the space station. However, space is business, so you have a fixed budget and a time limit to complete the project. As well as juggling with the many financial and payload problems, you will have to contend with fires, explosions, workforce strikes and sickness. In addition, if you do not attach the modules correctly, the station may suffer air leaks and so on. Further, it is not just a matter of docking modules with risk, you must plan ahead as some modules need adapters to enable them to dock on the station, others need supports modules to allow them to operate at all, and so on. You must have enough plug stations for the people who are working on the station, correctly position the modules so that the centre of mass is not unstable, etc, etc.

Space M.A.X. has quality written all over it. It will take you many, many hours just to come to grips with the details - never mind succeed in completing the project. The program is so useful that, if there are

any business managers reading, Space M.A.X. would make an excellent business management training tool. GQA graphics and typical PC sound do not detract from the heavyweight, I loved the Amiga version with interest.



S	Presentation	90%
	AI	90%
	Atmosphere	90%
	Engagement	90%
	System	91%
	Overall	90%



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For a full explanation of review classes and ratings, look at page 82 in Issue 21. If you have any queries or suggestions on any aspect of adventures, strategy or roleplaying games then send them off to: Paul Pigley, TGM, PO Box 18, Ludlow, Shropshire SY18 1DB.

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LATEST
RELEASES

The Games machine

REVIEWS

84 ■ THE NEW ZEALAND STORY

Ocean have done the impossible and improved on the arcade original. It has been a struggle to get a go on the game in the TGM offices with everyone fighting for the joystick! Follow the stirring story of Kiri Tiki and his friends in this antipodean adventure.



84 ■ FIENDISH FREDDY'S BIG TOP 'D FUN

Yet another mail-order circus game hits the streets. Save the Big Top by clearing big events as you fight through six amazing acts while avoiding the mean depredations of Freddy the elephant clown — a creation from Mindscape.



AMIGA

Alan Legon	86
Beam	83
Football Freddy	86
Gemini Wing	89
Grand Prix Circuit	85
Indiana Jones and the Last Crusade	80
Kirby	85
Landscape	82
The New Zealand Story	86
Nightmare	86
Rick Dangerous	80
Sea	87
Snake of the Art	87
Tom and Jerry	83

ATARI ST

Beam	80
Chaos of Wrath	88
Football	87
Gemini Wing	84
Headshot	85
Indestructo	86
Indiana Jones and the Last Crusade	80
Mr Tiki	86
Nightmare	86
Playboy	85
Rick Dangerous	85
Tom and Jerry	83

PC

Kirby	83
Starway	81

COMMODORE 64/128

Afternoon Indoor Soccer	81
Beam	80
Boots Full House	80
Tom and Jerry	83
Gemini Wing	84
Nightmare	86

SPECTRUM

Boots Full House	80
Crusade	80
Domino	81
Gemini Wing	84
Indiana Jones and the Last Crusade	80

AMSTRAD CPC

Domino	80
Boots Full House	80
Domino	81

SEGA

The Baseball	87
Galaxy Force	87
Crusade	86

No violence please, this is a cartoon

TOM AND JERRY

Magic Bytes

Tom the Cat and Jerry Mouse are the stars of some of the most uproarious (but hilariously funny) classic cartoons ever made. In this, their first pixelated adventure, subtitled Hunting High And Low, you play the part of Jerry racing around the house's two rooms, picking up bits of cheese and avoiding the grasping paws of Tom.

When Tom catches Jerry a few seconds are knocked off the mouse timer (after ten inches off his tail, his muscles are stretched to collect all the cheese, but how to stop Tom?)

Rooms contain obstacles to slow him down, which can be jumped over, large doors on shelves can be dropped onto Tom's poor old head, bananas slide down him side across the floor, or there are several distractions to catch Tom's attention making him oblivious to mousey antics.

Rooms are linked by mouse holes set in the starting boards, which race up a sub-game; Jerry runs down the tunnel dodging mousepaws and vermin after unpleasant steaks thrown in by Tom, while catching cheese. Five rooms in six minutes seems like a tough task, especially with Tom on

your tail, but is the smell of cheese hard to resist?

We found Tom And Jerry a disappointment. The sprites look reasonably close to their cartoon counterparts but the actual gameplay collapses through too little content to engage interest for long. Collecting cheese and dropping things on Tom is amusing, but only for a very short while.

£24.99

AMIGA
45%

Magic Bytes should have employed the services of a decent interior decorator to sort out the walls in this game, they're eye straining. Tom and Jerry move around the screen rather awkwardly, and this, coupled with the boring gameplay, causes frustration and flying joystick very quickly.

OTHER FORMATS

No other versions planned.



The sprites have a nice cartoony flavour to them, but the game lacks much to do

£24.99

AMIGA
47%

The Amiga game scores slightly higher for its improved tunes and amusing laugh which Tom utters when he catches you.

£9.99
CASS.

AMIGA
41%

£14.99 disk

Frankly the worst of the three versions, the bright garish backdrops don't fit the usual blocky CGA graphics. And Jerry's almost the same size as Tom... not convincing. Consider carefully before shelling out.

Antipodean antics full of kiwis

THE NEW ZEALAND STORY

Ocean

New Zealand is a very nice place to live, especially for Tiki and his friends in Auckland Zoo. They are kiwis, lovable little yellow birds who wouldn't hurt a fly. But unfortunately the game's baddest game would — a psychotic walrus with a healthy appetite for kiwis is the villainous perpetrator of this pestos.

When Tusk Features snatches Tiki and his friends from the zoo in the dead of night, Tiki luckily escapes. And where better to begin the search for his companions than in Auckland, armed with a bow and an unlimited supply of arrows with which to hit the maniacs infesting each level. These include creatures as diverse as snails, frogs, penguins and chimaera. Some run around on their own legs (two or four), others ride around on a wheel and wily array of transport (everything from balloons to grapes).

As Tiki leaps around from platform to platform in five locations shooting, bad-dies often leave behind fruit (for bonus points), or a variety of bonus objects including lasers, bombs and a fireball-



spitting wand, and an alarm clock which shuts the baddest for a few seconds when collected. But as kiwis don't fly Tiki moves about in a pair of trendy blue trousers which enable him to leap and bound. Often, however, dead ends pose a problem which can be overcome by hitching a ride on a balloon suspended at the bottom of steep inclines, or by killing one of the airborne creatures.

Wily obstacles are tackled by darning an aqueduct, but the attractively designed and detailed aquatic maniacs

Don't be fooled by the calm or friendly appearance of The New Zealand Story. Ocean have done the impossible and improved on the arcade machine in this highly playable game.

machine

TOP SCORE

Shock horror headline starts war to death

GEMINI WING

Virgin/Mastertronic

Readers' your gutter-press Sunday paper, you may never have realised that these 'alien restaurants on the moon' stories can have some really cornybeds. For years now, the *Sunday Spelt* has printed inner stories about our stellar cousins. 'Isolated beings, they ignored till one day a journalist coined the headline 'Die Mutant Alien Scum'.

All hell was let loose, the aliens declared war on Earth and prepared for an easy victory. But rather than meet the *Sunday Spelt*, they would have been better off waiting. Earth's weapons technology development. The Gemini Wing project was

ready and launched against the aliens without delay. As a Gemini Wing pilot you are sent (with or without a companion) into the dimensional voids to shoot the official Gemini Wing battle cry 'Die Mutant Alien Scum' (and hit a few of course).

Prepare for a journey into a weird alien-dimension where level after level of posed all decisions wait to follow you away. The action takes place in many levels vertically scrolling locations, and the aliens aren't the only hazards. Gun barrels, walls of doom and fumes as well as mean end-of-level battles use to bring about your demise. Your standard weapon is a temporal logic gun-balls (extra weapon pods) are occasionally created.

There are three ways to gain these gun-balls: first, shoot certain aliens as they hover; second, shoot aliens called Bringers, which drag a string of eight gunballs behind them; third — desperate but sometimes necessary — rip behind your partner in two-player mode and nick his gunballs.

Gunballs include three-way fire, 3000, 5000- and 70000-point bonuses, alien-



With identical graphics on the *Jaggle Shift* and the *ST* (above), it's the cheaply C64 game (right) which suffers most.

seeking missiles and the awesome wind-screen wipers of doom.

A wonderful cartoon-like quality enters with the end-of-level routines, large out-of-scale creatures, something resembling a walrus and a huge sentient battle craft. The going gets very tough, especially on later levels, but *Gemini Wing* is playable



ES.99

C64X

£14.99 disk

With a good title here on the 128K version, the *Jaggle Shift* game is every bit as tough as its big brothers, though the action shows aliens a touch when a lot of aliens are on the screen at one time.



are as dangerous as their landed cousins. Watch out, too, for the oxygen level in the status panel: slip under water for too long and Tiki flaps his little wings in a vain attempt to reach fresh air.

A kiel friend is saved at the end of each level, and at the completion of every four screens a fatty appears to have a go at stamping Tiki's card.

Right from the start *New Zealand Story* (can you think of a less hard-sell game title?) had the TQMI office in turmoil, with everyone fighting to have another go. It may sound like just another platform game, but its excellent graphics and subtle coupling with the compulsive gameplay make this one you must add to your software collection. The arcade original was very good, but Ocean seem to have done the impossible and improved on it.

4.0

enough to stop you feeling the old why-better-fusion. With a lot of coin-op conversion interest around at the moment, we're glad to say that Gemini Wing is one of the better examples.

4.0

£9.99

£9.99

Saves 62%

£14.99 disk

Although colourful, the ferocious Maxis sprites make it a wee bit difficult to avoid danger at times, and the music is a bit of a pain. Worse still, there's only a one-player mode, which kills the point of the game a little.

£19.99

Saves 71%

The graphics are colourful and the ingame tunes are jolly, but the Amiga version gives us the impression that the machine hasn't been used to its full potential. But the game is very playable, and that's what counts at the end of the day.

£24.99

Saves 90%

Once you've recovered from the shock of seeing sunglasses-wearing toddlers, goose-riding penguins and flower-lobbing crabs, the sheer playability draws you in and refuses to let go until you the game's completed. If you liked the arcade original this is the game for you, and if you have friends of Tiki and Co, this would be a good time to get acquainted.

OTHER FORMATS

The Commodore 64 version should be available by the time you read this, priced £9.99 cass, £14.99 disk.

UPGRADES TO HURRY UP!



£19.99

Saves 71%

The alien mode wraps around with great cool cresting havoc for an unimpaired player. A pleasant time plays throughout the game, and the graphics are of the same cartoon quality as the Amiga's.

OTHER FORMATS

The Amstrad CPC version (£9.99 cass, £14.99 disk) should be available by the time you read this.

VERSION UPDATES

AMIG ST

Hawkeye

THALAMUS £19.99

Commodore 64 85% — TQMI, Amiga 87% — TQMI

Amiga 87% — TQMI



In retrospect, having waited so long for it, perhaps the Amiga version was over-rated compared with its C64 original — and the delay has made Hawkeye's graphics looking even less than anything in comparison to other 16-bit releases. In most respects, graphically identical to the Amiga game, the only real difference lies in the title tune (though neither of the 16-bit versions are quite as good as the C64's tune).

Machine Update 78%

AMIG

Grand Prix Circuit

ACCOLADE £14.99

PC 66% — TQMI, Commodore 64 67% — TQMI

Amiga 67%

Buzzing Amiga Mania! may well cheer its appearance, but the rest of us will probably carry on sniggering, not that the game's awful. It's just that we've seen it all before: pups. There have been about as many racing games on home computers as about left-aps, and frankly these days a game has to be something pretty damn impressive to stand out in the crowd. One for dedicated enthusiasts only.

Machine Update 51%

AMSTRAD CPC

Eliminator

HERSCHEL £9.99 cass, £14.99 disk

Am 87% — TQMI, Amiga 84% — TQMI

Amiga 84% — TQMI

The blocky and rather gaudily coloured sprites don't bode too well for the CPC version of this game, and first impressions aren't helped by explosions, both incorporated enemy craft ingesting destruction too long. But the action is fast, the enemy enthusiastic and the going tough. It still rates in gameplay, but the Amstrad version is definitely lagging behind the others.

Machine Update 67%



It's a megab-ot, a hot shoot-'em-up

CHARIOTS OF WRATH

Impressions

Impressions themselves escaped the wrath of Microsoft Impressions in a recent software wrangle. Because the shoot-'em-up section of this game bore a marked resemblance to the forthcoming *Blip-Blip Brothers* game, *Arion II*—regardless of how many times Microsoft's solicitors were cautioned that the two games were adequately dissimilar. And so the story of the *Chariots Of Wrath* can be told.

You are Prince Agor of the Forgotten Kingdom, a handsome warrior whose top-paced, turbo-charged actions have led to the king commissioning you to remain within the royal castle's confines. Aside from the tedious task of restraining your macho, battle-hungry body, the situation worsens when your betrothed gets kidnapped by the Barons. You treat the dilemma as any hero would and go in pursuit of your princess (and there wouldn't be much of a game if you didn't).

Standing in a castle corridor, various defendants try and stop you from leaving. As they jump out from behind walls

you aim your light-bulb gun with precision, each adversary needing multiple hits to destroy.

To continue breaking through the castle battlements you play a Break-Out game, with the non-obligatory bonus points to collect and bullets to avoid — in this stage of arrows.

For the main sections of the game you take to your spaceship and battle through vertically scrolling scenes, whereupon all forms of enemy appear, both stationary as part of the landscape and mobile as part of a fight formation. Weapons pool occasionally rolls by giving bonus for increased firepower, moving obstacles, multiple hits. Defeating the end-of-

level boss leads to another Break-Out screen, then a horizontal scroller where you collect energy pods to fuel the ship. They must be collected within a time limit, and taking from one of the present platforms on which they lie is only as easy as it is.

Now then proceed to another vertical shoot-'em-up section which is followed by a simple Asteroids clone. The game

progresses, slotting in the various sub-games in between the vertical scrollers, until the Baron's castle is reached and your beloved rescued.

Impressions obviously thought a shoot-'em-up in itself just wasn't enough. While the shoot-out in the corridor is quite enjoyable and reasonably appropriate to the clichéd fantasy-medieval scenario, a Break-Out stage is a strange and unwanted choice of format. The platform stage's time limit is too tight and the margin for error too small, and it's most infuriating to be sent back to the start of the stage when you fall or run out of time.

Thankfully, it's worth fighting through whatever leads the fantasy scenario here because the shoot-'em-up is indeed a great battle. It's by no means original but graphical presentation is neat, facilities and playability is high, pitting unusual opponents over imaginative backgrounds to be blasted away by often wildly heavy firepower.

We wait with bated breath but for *Arion II* — Megablast, but in the meantime *Chariots of Wrath* is a quality shoot-'em-up, complete with intricate stages, which is bound to satisfy.



£24.99

SAVE UP
TO
77%

The characters in the first section, the shoot-out, are bright and characterful and their instantaneous appear-and-disappearances lend a nice cartoon-like air. The platform stage's sprite is crude and blocky, though, and the background graphics for that scene, like the Break-Out variant's graphics, are unsophisticated and rather drab. This is more than made up for with the blaster, with bold and colourful sprites and backgrounds and smooth three-layer parallax scrolling. The graphics in the second shoot-'em-up level are brilliantly defined — a huge crab and frog in the background, realistically drawn, and superbly shaded turtles attack. The amount of objects onscreen when firepower is built up is quite impressive, and even though things noticeably slow down at times, it never fails to be a hectic blast. Sampled spot effects are adequate and forgettable, but the music isn't bad at all. A pretty but entertaining game.

OTHER FORMATS

Amiga, also at £24.99.



By no means original but graphical presentation is neat facilities and playability is high

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A night on the tiles

BEAM

Magic Bytes

In a mysterious artificial world far away from our own, you have been chosen to battle through 27 levels packed with lethal dangers never before witnessed by game man. But there's no time to waste fretting about what lies ahead of you as you leap into the cockpit of your streamlined battle craft and prepare for some action.

After a choice of playing either solo or against a friend, you're faced by a screen filled with blocks (which have various functions), energy stations and very vicious killer pods. The aim of each level is to connect the energy stations to one another under the cautious attention of tiles and killer pods. Many tiles are stationary, including dead stones (kill on contact), magnets and motion tiles. Mobile hazards include movers, atrophicholers and stoppers. Few tiles (apart from the deadies) do you any real damage, they just slow you down enough to allow the killer pods to attack.

How to play? On the job, head for the orange coloured energy station and whisk into it. Your craft turns orange, so whilst in the energy station opposite it and — hey presto — a beam of laser energy links them. Carry on like this until all the energy



£8.99
\$9.95

CHART
74%

£14.99 disk

As colourful as its 16-bit cousins, this is one of those cases where for some indefinable reason the technically lesser machine has the better game in playability.

OTHER FORMATS

No other versions are planned.

£24.99

CHART
72%

There's little to choose between the two 16-bit games, but shading on the Amiga is a touch snailier than the ST's, and the in-game tone is heartwarming-ly good.

stations are linked, then prepare to tackle the next level.

For the first few games Beam certainly makes you realise how rich its visual world

'Five and seven, fifty-seven...'

BOB'S FULL HOUSE

TV Games/Comark

Anyone remember the good old days of Celebrity Squares, when Bob had just begun his career as a quiz show host? From the money-titled first prize of that glorified roughie and crossed as Mr. Montague the Family Fortune display computer, Mr. Montague has reached the dubious heights of hosting Opportunity Knocks, so that day. Then, of course, there's his Full House...

For one to four players, the computer makes up for any lacking numbers. Each player has a bingo card with 15 numbers which are lit by answering various factual but often trivial questions.

In round one, the aim is to light the four corners of your bingo card. A question is asked in the top row of the screen and the first person to press their buzzer (an allotted

key) enters the answer via the keyboard. To help you, the answer is marked out with dashes and spaces (like Hangman). An incorrect answer throws the question open to the buzzer again and you're 'outted' — unable to answer the next question. These rules also apply to rounds two and three.

The middle line of your card is the target in round two, where each player is asked questions individually. Card numbers correspond to different categories (which

change occasionally), so the number you choose determines the subject.

It's a free-for-all, quick-to-round next until someone completes their card and wins the game. They go on to the Golden Bingo Card, where there are 15 questions to answer in one minute. On a correct answer the clock stops and a number remains to either gain the equivalent in cash or reveal a letter. The letters, with luck, eventually spell out the location of a hot spot.

As opposed to A Question Of Sport, Bob's Full House varies little from just

£7.95

CHART
54%

The title music bursts forth as the game, with great eventuality, finishes loading. This piece and the in-game jingles are fun and well composed — audio is the game's best feature. A robotically animated Bob face captures some of the character of the man when questions are being displayed, but the angled view of the contestants shows them as an ugly mess of pixels. Their portraits are quite amusing, however, despite overly comical deliveries. A weird little creature unique to the C64 version is 'Wild House Mouse', a black rodent who paces around the contestants' desks.



your vocabulary is. The alienish ship dips around the screen so slowly that for the first few attempts you bash into the facilities more than the other way round. But veterans of other such seemingly uncontrollable games as Asteroids, Dots and Thrust will soon pick it up. Although tough at the outset, *Island* provides a fairly stiff challenge to those willing to persevere with the frustrating controls.

MC

At night on the floor is acceptable fun on the ST (left) and Amiga (below)

£24.95

72%

Island is a very colourful game with pretty landscapes, vicious Killer Pods and annoying flies. The level which plays throughout the game does tend to become fairly pastingly annoying after a while, but the volume of stuff soon sorts this out.



A full house on the Quiz (below left) and the Amstrad (below)

straightforward questions and answers so it's easy to translate effectively to computer. Clear displays of bingo cards and questions are all that's necessary to capture the essence of playing Bob's game but TV

Games have put a heavy emphasis on keyboard skills; multiple choice answers would have been far superior for most quizophiles.

The questions themselves are looked separately from the main program — much making is involved here. This would be desirable if not for the fact that the questions soon repeat themselves, a fault which will hopefully be rectified with question data-cassettes.

As a one-player game, *Quiz For House* is of little interest, but with friends the competitive spirit jolles things along for a while. Ultimately the limited question range and essential typing skills spoil the possible value of the product. Sorry, TV Games, you've been outted.

MC

£7.95

57%

While not overwhelming in the colour department, the Amstrad's graphics are very neatly and clearly done, making it the most visually pleasing version. Although the contestants lack detail, Bob's image is large and is a great focalisation (if you'll excuse the word), but all people twitch nervously as if restraining a sneeze. Considering the CPC's sound limitations, the theme tune is a good rendition of the TV original.

VERSION UPDATES

PC STARRAY

Logotron £29.99
Amiga 100% — 1000 80

In this Defender-inspired game cyber and disk blue are the predominant colours, given in VGA mode, and without a joystick it's tough to play because the keyboard functions are difficult to master. There are several Defender-style games on the market, unfortunately StarRay on the PC isn't one of the better ones.

Machine update 500%

AMIGA

SDI

ACTIONVISION £24.99

Ami ST 80% — TOSMIH, Spectrum 70%, Commodore 64 60%, Amstrad CPC 20% — 100000

Taken from the Sega Global Defence, SDI boasts impressive graphics and professional presentation, but this does little to disguise the thin and repetitive gameplay — something it has in common with the ST version. In fact the major differences — as is so often the case — are to be found in the in-game tunes and sound effects. Little more than a modernised *Master Command*, SDI looks good but doesn't taste the same.

Machine Update 57%

COMMODORE 64/128

American Indoor Soccer

MOSSCAPE £19.99 Ami, £14.99
PC 40% — 100000

Clubby players look like adolescent girl players, complete with hockey skirts, and run like they're wearing rollers full of cement. That is, until someone scores, then the action turns around in a simulation of a Stanley Cup game. Effects and music are both very basic and are from somewhere in the early, early days of C64 gaming. Happily, this is one of those quality management games with a touch of irony, meaning that despite outplays any virtual weaknesses.

Machine update 600%

SPECTRUM ■ AMSTRAD CPC ■ AMI ST Dominator

SYSTEM 3 Ami ST £19.99

4-bit £9.99 Ami, £14.99
Amiga 80%, Commodore 64 60% — 100000

No surprise from the ST graphics of the same unusual design as the Amiga but a little lacking in detail, though scrolling and movement is fine. The Spectrum assigns different colours to real scenery and different types of ship which generally works quite well. Near-misses with other objects sometimes cause attitude problems, however, and player missiles and resulting explosions are often of bizarre and changing colouration. Amstrad graphics are not a pretty sight. Although scenery uses colour well, it scrolls slowly and jerky white blocky spaces take part in a game too awkward and boring to play. Sound on all versions is average for the particular machine but CPC effects are notably poor — peeping and meeping.

Amstrad CPC owners steer clear; otherwise, *Dominator* is another in the long, long (long line of decent but unremarkable shoot-'em-ups. **Machine update Ami ST 700%**
Spectrum 600%
Amstrad CPC 400%

£7.95

52%

The rectangular shape of bingo cards allows easy use of colour without risk of colour clash, but the LCD-style segmented numbers make an irritating mass of small angular shapes. The black-and-white lines are miserable but could have been more carefully drawn and better animated. The sound's crude even for a Spectrum.

A new head-scratching maze

LEONARDO

Starbyte

Judging them by title, you could be excused for thinking, as we did at first, that *Leonardo* is the latest art utility. In fact, that's the game's intention: a roughish character whose only aesthetic quality is the highly illegal and morally dubious 'art' of burglary. With a taste for jewels and gems, cash and coins, he must tread carefully as he gathers his loot for fear of capture by the law — or even ghosts!

Each of the 10 mouse-like four-way scrolling levels has boulders interrupting his stealth-footed path but he has the considerable strength necessary to move them. His muscle is so great that they keep moving till they hit another object, sending the ghost or guard back to their home within the level — the Watchman Lodge — if timed properly. He can even crush the fumes of rock into dust!

His pushing power is essential to complete levels. The main type of treasure on each level is gathered together in a line, a task requiring planning, strategy and judicious positioning/demolition of boulders.

Movement around levels is assisted by mantle covers — an 'in' cover transports Leo instantly to an 'out' — and a radar device. Leo, the treasures to be gathered and the bad guys are shown on the radar screen but, as Leo made it himself, a often malfunctions.

Objects to find on each level include valuables for extra points, and quest dynamite to send ghosts and guards to the Lodge, and paralyzing rock to temporarily freeze them.

Leonardo has strong similarities with

Logotron's *Xor* and its sequel, *Prospector* in the Maze of Xor, mixed with a touch of Boulderdash. Starbyte's release has fewer puzzle elements than *Xor* but is still as brain-teasing through the difficulty of gathering treasures in a line. There's little time to plan and think with the marauding ghost and guard tracking you and a time limit for the level, so the destination for treasures has to be calculated while on the move.

This game is far from easy and often frustrating, but if you think you can tackle head-scratching manipulative puzzles while dodging relentless enemies, *Leonardo* will keep you happily and busily occupied for hours.

WL



A heavy cross to bear on the dusty trail

INDIANA JONES AND THE LAST CRUSADE

US Gold

US Gold's last Indy game was a disappointment, and there must be something in the theme that jinxes games designers, because — it has to be said at the outset — this newest one is its equal in the let-down stakes.

If you have seen the film, you'll be able to identify the obvious game sequences, as Indy Jr (the last Indy as the man) and Jones Sr (he takes the Nazis in the attempt to get the Holy Grail first). The game has four distinctive levels, first set back in 1912 where the teenage boy scout Indy discovers a group of treasure hunters in a spooky cavern searching for the Cross of Coronado. Indy, of course, must find it first, and escape!

Obstacles: natural (falling stalactites, draughts etc) and man-made (collapsing bridges, and the Nazis) threaten his plans. But escape with the Cross he does, onto a circus train where he discovers his photos of snakes and that a whip is useful to divert a lion's attention.

There's a 1938 as World War II looms, and the adult Indy is searching Camel

Burnside for the Knights Templar's shield which should offer clues as to the whereabouts of the Grail in the Jordanian desert. It was here, in the film, that Indy rescued his father (admirably played by Sean Connery in the movie, but sadly lacking in the game). Nazi troops, tanks, trucks and lightning make reaching level three — the Ziggurat — difficult.

Thanks to his presence, the Nazis order the airship taking Indy out of Germany to return, and the search is on for Dr Jones Sr's diary containing his notes on where to find the Grail. As Indy wanders through the Ziggurat looking for a handy plane to escape in, he must top up his supply of passports (Indy fans know what happens to people without tickets) because if the passport icon in the display panel disappears completely an alarm sounds and all hell is let loose.

The final level is set in the temple where the Grail resides, guarded by those whining blades, collapsing tiles and the rest.

Digitized pictures of Indy add the best touch to what is a very average platform

game. After all the hype it was fair to expect something special, but although Indiana Jones and the Last Crusade is graphically respectable, its (predictable) gameplay says: leaving only frustration when Indy gets killed for the umpteenth time. We're hoping for something much more exciting from the Lucasfilm adventure game.

NO

SAVES 46%

**£8.99
CASH.
£12.99 disk**

Predictably monochrome (and not necessarily a drawback, colour isn't the only missing thing: what happened to the explanation that places the first level of the 1938 version?) More seriously, why is Indy an adult and not a boy scout? Movement is slow on the slow side especially when Indy whips a bad guy; not very impressive.



Remastered of DoubleDutch: Leonardo can give you pause for thought — Amiga

£19.99

ATARI ST
77%

In a clever intro sequence Leonardo walks up to his house and smokes a cigarette before entering and switching on a neon sign. He's an amusing sprite and well animated — the game is of equal quality but the ghost is roughly drawn. Backgrounds are gaudy patterns which don't help concentration, but walls and objects are adequately fashioned. Sound effects are weak, what few of them there are, but music is well composed — busy yet soothing.

£19.99

AMIGA
78%

Although the entire screen area is used, graphics are only marginally improved — most noticeable in the game intro. Sound is vastly improved, however: three tunes that are not only very well written but also use great sounds. Fantastic stuff. On the minus side, the bad guys are faster than on the ST version, making a difficult game tougher still. Ah well, that's the breaks.

OTHER FORMATS

OS4 (£9.99) and PC (£19.99) over the next couple of months.



Disappointing: the young lady gets cross

£19.99

ATARI ST
48%

Throughout, its graphical detail leaves much to be desired — Indy sliding across the floor without moving his legs and the amazing plastic waves in Level One which surely could have been animated. These omissions apply to all versions of this drearily repetitious game.

£9.99

AMIGA
38%

£9.99

£14.99 disk

A colourful loading screen promises a good game, but its actual appearance makes it look like a direct port over from the Spectrum — and reminiscent in even scenes, with Indy sweat-dripping at the speed of a crippled snail. See the movie, but approach the game with caution.

£19.99

AMIGA
48%

Additions to the ST game are a couple of extra sound effects, such as the Indy making an ominous effect when he moves. The same's true with the admittedly nice digitised pictures — but how much nicer some real gameplay would have been.

OTHER FORMATS

Expect the OS4 (£9.99/£14.99) and PC (£24.99) versions any day.

VERSION UPDATES

AMIGA ■ PC

Kuult

£10.00 (£9.99)

also ST 99% — T06600

With all the great visuals of the ST original, the Amiga version has a slightly larger play area and subtly different colour palette. The superb clever sound effects have been used and there's also a whole composed Jean Michel Jarre-style like music. Brimming with good instrument samples. It's a shame similar compliments can't be given to



the PC. Other than Hercules Monochrome, only CGA graphics mode is supported. White purple and cyan suit some of the stranger biological creatures and everything is well done. CGA would have generated a much better playing atmosphere. Effects are persuasive despite of shortcomings. For both versions, though, the brain-teasing, mind-bending puzzles have been reproduced wholly unscathed from the Atari, and that is certainly enough recommendation for purchase.

Machine update: Amiga 88%.

PC 91%.

ATARI ST ■ AMIGA

Rick Dangerous

£19.99 (£24.99)

Spectrum 100%, Commodore 80 97%, Amiga 100%, CPC 76% — T06600

Although the scenes surrounding our jovial junior only scroll intermittently — and then only — they make good use of colour, with effectively shaded rocks, wood and so on. Detail is packed into the scenery and gives them a certain flavour. The music is simple yet fun, and effects samples include a great repro-creating pistol shot and an amusing "Wassup!" as a killed character falls off-screen. The playing area is actually a little smaller on the Amiga, almost squares. The music is enticing — great sounds — and there's the addition of an appropriate jump effect. It's expensive for what it offers but, Rick Dangerous is a good, old-fashioned, highly-playable arcade-repetition game.

Machine update: Amiga 76%.

Atari ST 76%.



Nightmare on fun street

FIENDISH FREDDY'S BIG TOP O' FUN

Mindstage

Having been asked for incompetence Freddy the clown has decided to take revenge on the circus, a task simplified by its financial difficulties with a bank loan. If 10,000 dollars isn't sent very soon (or tonight), the big top will be forced to close... permanently (sweat).

Now, the player, guide us of the circus various artistes and attempt to perform as spectacularly as possible so as to draw in the crowds and pay off the debt. Meanwhile Fiendish Freddy does his level best to spoil the acts.

In Doing you attempt to dive artistically into a reoccurring, while Freddy interferes by using a large electric fan to blow you sideways. Juggling takes place on a unicycle as you catch balls and clubs thrown by a seal and press fire to launch an object into the air when your hands are full. Freddy occasionally interrupts this task away with a flash, allowing him to throw his own items your way — a missile or flying bomb!

On the trapeze a well-timed button press sends you through the air to catch hold of the next flying trapeze. Freddy plots a strange flying contraption and if you're too



slow he snips the trapeze wires with the giant scissors built into its foot!

In Knife-throwing the object is to land balloons tied to a revolving board, but it's all too easy to mistime and hit the bear, lightly tanned body of the dumb board who's allowed herself to be married to it, — especially when a certain maniacal clown throws a bomb at the giant wheel!

You can balance on the Highwire while Freddy throws bombs in your direction, and round off the performance by jumping into a squeal canon for gun powder-powered flight. The safety net is a rather unhelpful device, to say the least — it's a brick wall, and it's position is quickly set as Freddy arrives. Too slow and he blocks the cannon with a giant cork, causing it to backfire with explosive results.

So soon after the excellent Circus Attractions (TOM020) no-one could've predicted the appearance of another multi-

event big top game, let alone one better and more fun than the Golden Goddess release. Quality is assured here: Chris Gray, who wrote *Initiator* and co-created the all-time classic *Scudenberg*, was the leader of the team who created Freddy's antics.

There are many, many humorous parts within the gameplay (but we haven't the space to describe them here; they're a delight you'll discover for yourself). As a one-player game it would soon become tiresome, but with a group of friends — up to five people can take part — it's a great source of entertainment and a unique piece of software which everyone should see.

WL

OTHER FORMATS

Atari ST and PC (Amiga price) within the month.

£29.99

and 89%

It has to be admitted that in a number of places frames of animation are lacking and steps in movement are jerky. This doesn't matter, though. And huge, hilariously drawn sprites performing all sorts of wild and wacky deeds, any faults disappear. Music is jolly and has an authentic circus atmosphere while sampled effects are fittingly silly. On the expensive side but truly an interactive computer cartoon.

Join the merry club!

MR HELI

Firebird

The hero of this push-scroll shoot-'em-up is an amiable, round mar-helicopter, a member of the Cosmic Hel Patrol called upon to save the innocent inhabitants of a distant and idyllically green planet.

'The Muddy' — a lovably named mad scientist — leads a band of twisted followers with a predilection for destroying life in whatever form they find it. It's your job to help mar-helicopter Mr Heli do it to them before the muddies — as they're colloquially known — do it to the animals.

The scrolling is mostly horizontal but sometimes veered. Hel batters with forward and upward-firing canon to destroy enemies, but blasting certain destructive parts of the scenery reveals blue crystals.

Collected, the crystals are worth dollars to be spent at single-product shops. These too are initially hidden within rock walls, but when hovered upon, with enough money, bonuses are gained.

It's rare these days to find an airplane shoot-'em-up that push scrolls, so at least with that in mind Mr Heli has some originality. Excuse it, though, and the game is very similar to Level One of *Alienoid Money!*. It's a shame it isn't as enjoyable as that 1994 Star Player (T04015). Mr Heli never loses above average, the vague attempt at a core progressive shoot-'em-up failing miserably, and so substitute for unusual menacing monsters. Although the various displays take up little screen area, when combined with the bulky scenery the game plays quite claustrophobically and there's never enough room to manoeuvre properly.

WL

OTHER FORMATS

Spectrum, C64, Amstrad and Amiga all available soon, at standard full-price.

from £7 65%

The two-layer parallel scrolling is juddery and splits movement a bit jerky. The graphical highlights is the cute way Mr Heli walks when on the ground. Although the background is a nice happy ditty, big-standard ST sounds are used, as are those used for effects, so the soundtrack is spoiled.



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SOFTWARE SNAX

NIGHTDAWN

Maple Bytes ■ Atari ST £24.99,
Amiga £24.99, Commodore 64
£9.99 cass, £14.99 disk

Nightdawn is a sharp, geometric, synthetic world, a mere projection of a designer's imagination but a viable, tangible, audible planet. Sitting in a cybernetic control centre, you view a robot tank from above, dropped by a freighter onto Platform One, a vast network of corridors floating unaided over the surface of Nightdawn. Your aim is simple: to find the exit which leads to the next platform level.

Gates prevent progress, but collecting keys and then passing over the matching switch alleviates the situation. Laser beams have on/off switches, as do escalators, but of greater concern are minefields, land



Hardly a new dawn: ST version

by a mine, and a patrolling robot.

Hits are occasionally found to improve your tank. A double cannon adds your initially defenceless vehicle, mine detector reveals concealed mines, and exit indicator and water tank help you escape. Nightdawn is a maze shoot-'em-up which puts the emphasis on key collecting and scavenging.

Simple bar-reflex platforms hover over similarly meandering ground patterns in the near-identical ST and Amiga games. The parallel scrolling is smooth and swift in the vertical plane but jerky horizontally. Sprites are plain, the tank being easily and placed in appearance. Average ST audio but the Amiga has a brilliantly over-the-top set of effects samples.

Graphics are simpler still on the C64 and with its long history of bar-reflex Nightdawn should be more than just blocky angles. Sprites are no better — the robot tank is nothing short of pathetic.

Music better suited to a budget label, it's too old-fashioned and derivative for its own good.

Machine ratings: Atari ST **B-2%**,
Amiga **A-4%**,
Commodore 64/128 **B-0%**



Clive Barker would care in his self-made genre if he saw the game associated with his eternally evocative

HELLRAISER

Excel ■ Atari ST £19.95

Completely unconnected with Clive Barker's movie of the same name, the Hellraiser is a motley crew of humans, aliens, cyborgs, robots and San readers who spend their time drinking, throwing parties, fighting, eating, watching Postman Pat videos, and appreciating poor defensible points. An aide of the Liberator Corps, you're dealing with their latest raid.

For one or two players, the screen is split horizontally to give individual side views of battling warriors. Breakers through-life are being taken over by Hellraisers to be eliminated as you try to find the exit. There you find a Wing battle cruiser to clear the horizontally scrolling airspace of Hellraiser ships. Circular symbols are collected for such handy add-ons as bombs or a long-range laser.

This may be a two-part game but it can't disguise the fact that it's a crude rehash of old and overused ideas. The corridor section looks similar to Psychonaut's Oblivator, but doesn't play like it because the hero isn't capable of as many actions. Horizontally scrolling shoot-'em-up is really all there can be said about the other play

and instantly forgettable half of the game.

Plain backgrounds at low colours only serve to make the limp cruiser shoot-'em-up worse still. Strident scrolling is offset by drab sprites and the whole game is scarred with clichéd ST sound effects, banal music and ineptly and lengthy repeated loading.

Machine rating: C-4%

ALIEN LEGION

Gainster ■ Amiga £24.95

Yup, Earth's been caught with its pants down again by a race of psychotic aliens bent on universal domination. With all the soldiers in prison and the population drenched under the green, slimy rain hail only leaders (and Captain Cosmo) and his buddy laser gun are left to oppose the mechanised might of the galactic con-



Trying to be Eaten, but failing to deliver...

quents.

Cosmo leaps around many platforms, attacked by the alien legions of the title. They include systems on stalks, walls in red squawks with green visers (no!) and scolding sprays.

Destroyed aliens occasionally drop vital containing either red or green liquid. Red reduces Cosmo's energy level, green saves it.

Two words sum up Alien Legion very average. Colourful but comatose. Cosmo's wandering around the screen shooting at the odd alien rapidly becomes dull entertainment. A mediocre Exolon-type game that fails to deliver enough to warrant the price tag.

Machine rating: C-6%

GHOSTBUSTERS

Sega ■ £29.95

It's been a long, long time since this game was first released to become one of the best-selling computer games of all time. Despite public acclaim, few reviews really rate it and after all this time it hasn't been improved for its Sega debut.

The rendition of the familiar Ghostbusters music is horrendous! Even when it's in tune the dire sounds used ensure a very necessary adjustment of the volume control.

Graphics are refined, evocative, loopy and drab. There's a lot of sprite flicker but at least the scrolling in the car section is smooth. The inclusion of the extra scenes to defeat Gorta is a good idea, as is the shop, allowing equipment to be purchased whenever viable, but five



Old, and if anything, worse than before

ghosts per building makes hunting too awkward and frustrating.

Ghostbusters is an old and simple game anyway, but with poor graphics and sound and worse gameplay, you won't want to call Sega's Ghostbusters.

Machine rating: D-2%

SKATE OF THE ART

Level ■ Amiga £19.95

It's no surprise to cool skaters to find that in *Skate of the Art* your graphic counterpart must tackle the world's most difficult skateboarder course — to become the ultimate skater. 20 horizontally-scrolling levels are filled with various obstacles to be negotiated using the moves at your disposal. Against a time limit, points are awarded



The main game is far from set — blue dangers, yellow stars, red-based up — but helped by the plain definition and poor animation

to stunts and a quick finish.

Bonus screens involve such strange pastimes as skateboard hurdles and crossing a pole by sliding on the perpendicular beam. *Skate of the Art* plays, and partly looks, like a cross between *Microcosm*, *Nikeat* and, more recently, *Super Skateboard Simulator*. The scenery scrolls happily and smoothly by while moves have to be correctly selected and timed — not exactly complicated, team-teasing action.

This simple, old-fashioned, repetitive game would be dubious value for money if competently programmed, but poor graphics and awkward gameplay mean it'd still be overpriced at £19.95. Even, or perhaps especially, skateboard fans should avoid this. **MC**

Machine rating 30%

QUARTZ

Firebird ■ Atari ST £24.95

Remember Asteroids? *Quartz* looks rather similar in parts. You start at the controls of a ship not blessed with much firepower, but stunts at least in dodging the large, spinning coloured balls called Habrons which attack from all angles and seem to have minds of their own. Blasting Habrons leaves them down into Quartz (not quite so dangerous, but they can still make a nasty dent in the hull of your ship). And blasting them releases Neutrons, which are what you're after, because if enough are collected power-up weapons are locked onto your ship's full including grenade launchers, firing thrusters, bombs and anti-aircraft.

Now you can get down to the serious business of knocking the stuff out of all and ramming parts landing the rogue Habrons of course, up to three power-ups can be collected at one time, so make the most of them, because as soon as the last



interesting graphics disguise averageness

Habron's destroyed you're whisked to a horizontally scrolling section where you have to avoid spinning balls trailing glowing tails. Anti-climax at its best.

Graphically *Quartz* stands out, especially the spinning balls in the first section, and the power-up weapons certainly help in your task to clear a path, but the game fails to add up to anything really special although it is fun for a while. **MC**

Machine rating 60%

GALAXY FORCE

Sega ■ £29.95

Perhaps Sega's wildest and most ground-breaking coin-op, with the most stomach-churning hydraulic chair, is the space-faring *Galaxy Force*.

As usual it's You against all of Them, and They must be destroyed with whatever weaponry You can lay your hands on.

Of the game's five levels, any of the first



the 3-D routines are poor and everything gets slowly forward, updating in huge jumps.

Four may be selected. Viewed from behind the player's ship, fast approaching obstacles on the 3-D perspective landscape should be avoided, but of course the biggest problems are presented by the enemies. The ship has both homing missiles and a machine gun to deal with them.

You could hardly expect a humble 8-bit Sega to come anywhere near the quality of the amazing *Galaxy Force* arcade machine, especially bearing in mind the console's size factor problem, but the conversion is still a great disappointment. It's not as if the graphics themselves are good. On the whole, sprites and landscape elements are haphazard collections of brightly coloured pixels, and are often tacky. Music and effects are standard Sega — thin and waxy. And gameplay is a merely middle-of-the-road, milky souped-up *Bug Digger* variant. **MC**

Machine rating 60%

INNER SPACE

CRI/Interactive ■ Commodore 64 £9.95 case, £14.95 disk

No, not a licence from the hilarious 1987 comedy film starring Dennis Quaid and Martin Short, but a very mediocre team-up-op. You're at the controls of a modestly equipped space suit exterminating 130 types of alien snail inhabiting nine horizontally and parallel-scrolling levels of inner space.

They attack in waves as you attempt to laser them into oblivion. The distraction of a mine reveals a bonus post; there are seven — smart bombs, shields, speed up, laser, proton pulser, naps, extra life and — a sting in the tail — the loss of a craft. And if the action isn't enough, crack your head on the inevitable end-of-level guardians. Blandly spritzed and yawnily perspective space is made a simulation stale, and even the hauntingly moody title tune fails to spark so little enthusiasm that you won't bother to practice enough to find whether there's more to this universe than life or anything. **MC**

Machine rating 35%

THE BASEBALL

Sega ■ £24.95

Have you heard of Reggie Jackson? No? Then Sega UK should correctly to remove all traces of the man who endorsed this game in the US.

There are 26 teams in memory and they can be chosen to set up one-player, two-player or demo games. When a human takes part he can select whether batters move automatically or are under his control and who pitches.

In a match, the pitcher can select his favourite throw, or use a curve shot. The pitcher can be substituted if desired. The batter can move left and right on his square and adjust his swing height.

The Baseball boasts some quality speech for an 8-bit machine and lots of it: the lively shouts of "Strike", "Play ball" and "Safe" all help generate an atmosphere (and there's more speech besides). The pitcher and batter are detailed and realistically drawn, with animation to match, but batters are indistinct (it's easy to confuse

the two teams) and the score is just a mass of flashing colours.

It's complete but a selection of teams doesn't help vary the fairly simple action, which becomes repetitive quickly in a one-player game. Very nice to both look at and listen to, but perhaps too expensive considering the limitations of computerised on-screen sport. **MC**

Machine rating 70%



Pace is lost as but repetitive when it comes to the action out on the field

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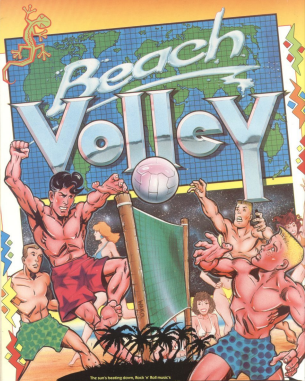
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